INDIAN MEDICAL ASSOCIATION

Doctors for Doctors and Community at Large

THE CGP NEWS

ASSAM STATE FACULTY

PURITY OF PROFESSION - PARITY IN HEALTH CARE Heath first, Healthy profession for Healthy Nation

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Editorial

Greetings and a very happy new year to our esteemed members. May we all stay healthy andhappy through out the year 2022.

On behalf of the editorial board, I deem it a great privilege to present this edition of "THE CGP NEWS, ASSAM STATE FACULTY " , The Official Publication of IMA College of General Practitioners, to our esteemed readers once again. I will be failing in my duty if I don't reiterate that Dr. Hemendra Kumar Borah, The Director, IMA CGP ASF is instrumental in bringing out this issue also after overcoming many difficulties. I owe my gratitude to Dr. Borah for leading us from the front always.

I was pondering upon what issue I should write about in my Editorial. The issue that came to mind was the plight of lakhs of medical students who had to bear the brunt of Covid 19 as far as their regular classes and practicals were concerned. Digital technologies have come to their rescue to some extent, but they too have their merits and demerits. Normalcy is still far from sight.. !

COVID 19 PANDEMIC AND ITS EFFECTS ON MEDICAL EDUCATION INNOVATION TO OVECOMETHE CHALLENGES.

The Covid 19 Pandemic and subsequent social distancing measures have resulted in continuous disruptions in conducting routine classes of the medical students worldwide. The urgency of the Covid 19 pandemic has rapidly brought on the development of many educational strategies across the world, the majority of which encompass the use of varities of digital tools. And one these tools that academic institutions worlwide have been using, is On Line Learning.

On Line Distance Education can be generally delivered to medical students in two formates: a) Asynchronus Distance Education, such as Recorded Videos and Postcads b) Synchronus (live) Distance Education (SDE), such as Video Conference and Virtual Class rooms. SDE has been widely used for educational purposes for medical students. A recent meta analysis of randomised clinical trials demonstrated a higher overall satisfaction for SDE compared with traditional education, showing that SDE that SDE was quite acceptable bymedical students.

ADVANTAGES:

The adoption of on line learning in medical education can have several benefits: one of the positive aspects of ODE is the flexibility of time and location and the subsequent increased convenience, which means medical students are able to adapt their schedule in an easier way. Besides schedule flexibilty, ODE can also be much more cost effective, as it does not require educators to move, while more individuals across different institutions can participate in virtual courses. In addition, e learning assists medical students to better adapt to a web based medicalworld that increasingly uses digital health services.

DISADVANTAGES:

On the other hand, ODE can potentially hinder Interpersonal Contact and Interaction between medical students and faculty members. At the same time students also fail to cultivate necessary communication and empathy skills for interacting with patients and their teachers. Lack of hands on training in the pre clinical years may have serious implications on the training of the students, which might result in difficulties in the following clinical years.

OTHER PROBLEMS:

Furthermore, it is important to consider the technical challenges that On Line Teaching and Learning in medical students can pose, which include problem with audio and video, downloading or streaming errors, loging problems, poor internet quality, security issue, as well as limited technical skills in both students and teachers. These difficulties can be more evident in developing countries.

EXAMINATIONS OF STUDENTS:

Outbreak of Covid 19 has also severely disrupted conducting of the examinations of the medical students. In almost all Institutions Written and Clinical examinations have been postponed, cancelled or delayed or replaced by on line examinations or new methods of assessment.

Covid 19 has an indirect impact on selection of specialties of their choices for many medical students. Due to the necessity of containment of the contagious nature of the disease, medical students were temporily removed from clinical studies, depriving them of the much needed clinical exposure for exploring their specialty of interest.

CONCLUSION:

The need for substitution of the traditional medical education during this pandemic has brought out varity of innovative ideas in medical education. All these innovative ideas should be carefully examined, as this could could constitute a source of future inspirations for medical educators. Along with all the difficulties it brought, this pandemic reminded us that human collaborations through science is one of the greatest tools of humanity to deal with the threats.

Before I end my editorial I would like to thank our members who have contributed with their valuable articles for this issue. We are hopeful that they will continue to write for ourforthcoming issues also.

With my sincere regards.

Let us Positive.

Let us take care and be safe
There is always a Silver Linings after Clouds.

Long Live IMA ASB
Long Live IMA ASB CGP.

Thank you,

Dr. Jagadish Basumatary
Tezpur

Guest Editorial

COVID-19 : Unpredictable War : How Long ?

Quote by Charles Dickens—" It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch o f incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair, we had everything before us."

We have passed through an unexpected, unpredictable time for last two years due to COVID-19 Pandemic which hits the world on March 2020, which stops our day today activities normally and shatters the world economy. It was the worst of times. During the period we were experienced and learned so many new things- how to fight against pandemic, experienced with the digital world which brings the world very close to each oneof us. It was the best of times.

Since the beginning of COVID-19 infection gradual and rapid rise of infectivity rate and number of deaths causing a concern to the whole human race. Around this time last year (2020) we forgot that COVID-19 pandemic may again be a matter of concern. Relaxation of COVID-19 restriction, gradual unlock protocol followed. But within no time 2nd wave of SARS-CoV-2's more virulent Delta variant hit the world. By the end of last year 3rd wave with Omicron variant with characteristic of rapid infectivity spread and less virulency has createdan unexpected rise of COVID cases all over the globe.

In India during beginning of 2021 the COVID infectivity rate gradually decreased, but by the end of April, 2021, again goes with a steeping rise and by May, 2021, the number of positive cases goes up to around three lakh per day. The death rate is also increased accordingly.

From August,2021, the number of daily new cases coming down till December,2021, and its number goes down to around nine thousand per day. During the 3rd wave of COVID-19 and existence of Omicron variant by December,2021, the number of positive cases start rising in the beginning of 2022, and at the end of first week of January,2022, the daily infectivity rate goes to one lakh per day and at the end of the month the number goes above 3.5 lakh per day. During the period the average death rate was in and around six hundred per day.

Interestingly by the beginning of February,2022, the number of daily positive cases decreased to around 1.5 lakh. In spite of decreased positivity rate, the number of daily deaths increased to one thousand till the middle of Feb,2022. Again, towards the end of Feb,2022, the daily infectivity rate decreases to around 10-15 thousand but the mortality rate was not decreased accordingly. The one reason may the late reporting and reluctancy of hospitalisation. Since the people were experienced living with COVID for almost two years lately most of the people suffering from COVID like symptoms have used to take medicines on their own without medical consultation and even they avoid testing for COVID so the actual number of positive cases may be more than the government statistics.

If we go to the history of COVID infection in 2020 it was Alpha variant-the first wave then in 2021, more virulent Delta variant-the second wave. Now we are in midst of third wave of Omicron with its infectious ability to evade the immune system, causing reinfection and breakthrough. Now public is under impression that it is less virulent and we can go back to our normal lives. The optimistic view is that enough people will gain immunity from vaccination and natural infection such that there will be less transmission and much less COVID-19 related hospitalisation and death. Assumption are being made about Omicron which may encourage complacency that this virus will continue to circulate as an endemic infection, will persist in a population or a region.

The central government is very much optimistic about over all COVID situation. One of consequences of the lifting COVID restrictions is that the onus of taking health precaution will fall from the collective to the individual. When we start thinking of COVID-19 as an endemic risk instead of pandemic, it brings with itself a shift in attitude to what as individuals we can do to protect ourselves and our families. As the virus is mutating and numbers of laboratories for SARS CoV-2 genome sequencing are very less in the country, to live with the virus it is very much essential to improve testing

and sequencing rates to track the virus and its emerging variants more closely. It is the prime responsibility of the government and we must cooperate for the better future.

Director General of World Health Organisation (WHO) Tedros Adhanom Ghebreyesus has already said that "conditions remain ideal for more corona virus variants to emerge. There are different scenarios for how the pandemic could play out and how the acute phage could end. But it is dangerous to assume that Omicron will be the last variant or that we are in the endgame. But learning to live with covid cannot mean that we give this virus a free ride. It cannot mean that we accept almost 50,000 deaths a week from preventable and treatable disease".

Now Centre for Disease Control and Prevention (CDC) of USA has said that Covid Booster loose their potency after about four months, raising the possibility that some people may need a fourth dose. Epidemiologist have said that "living with the virus" is an acknowledgement that eradication of SARS CoV-2, like what we did with small pox or polio is not possible. Instead, we will have to continue with strong surveillance of new variants, vaccine, boosters, affordable equitable access to antiviral drugs, mask wearing, sanitising and physical distancing." We have accept "new normal to live with virus" and to acclimatise ourselves with the new life styles of masking face, sanitisation and social distancing which is not a tough job to adhere if we balance sufferings of Covid and loss of a life. This will bring anew hope of new morning.

It is quite amazing and encouraging that 11th volume of CGP NEWS, of IMA, Assam State Faculty is on way to bloom. It is a splendid job done by Dr Hemendra Kumar Borah, Director, IMA,CGP, Assam State Faculty and Chief Editor of CGP NEWS. I sincerely thank Dr Borah for his dedication.

Wishing everybody good health and no sufferings.

Dr .Laksheswar Bhuyan, MS (Surgery)
Vice President,
IMA, Assam State Branch.

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CGP NEWS

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Message

Dear Members of IMAC CGP, State Faculty of Assam,

It is a tremendous pleasure to see the burgeoning progress of IMA CGP in the state of ASSAM. General practice is fundamental to all branches and disciplines of medicine. It is as a background work of all specialties and super specialties. A general practitioner is 'Jack of all and the master of many' in relation to the various subjects of medical practice is concerned. Family-based practice is the centrepiece of general practice, which includes all age groups in the family and for subsequent generations.

IMA CGP is the oldest IMA wing functioning on a national level. It strives to make general practitioners and all clinicians ethical, well-informed, up-to-date and skillfully trained in the ever-changing and fast-paced modern age.

I am very happy to see that the IMA CGP Faculty of the State of Assam has spread the CGP movement through its dynamic and well-organised activities, year after year.

I wish you all a brilliant future in your medical practice and a magnificent greatness in the work of IMA CGP at every stage.

Dr. Avinash V. Bhondwe
Dean, IMA CGP HQs

Contents

PROF. DR. J. A. JAYALAL MS, FRCS, PHD
PROFESSOR AND HOD SURGERY KGMCH
NATIONAL PRESIDENT IMA 2021

BURNS INJURY PREVENTION AND MANAGEMENT

INTRODUCTION

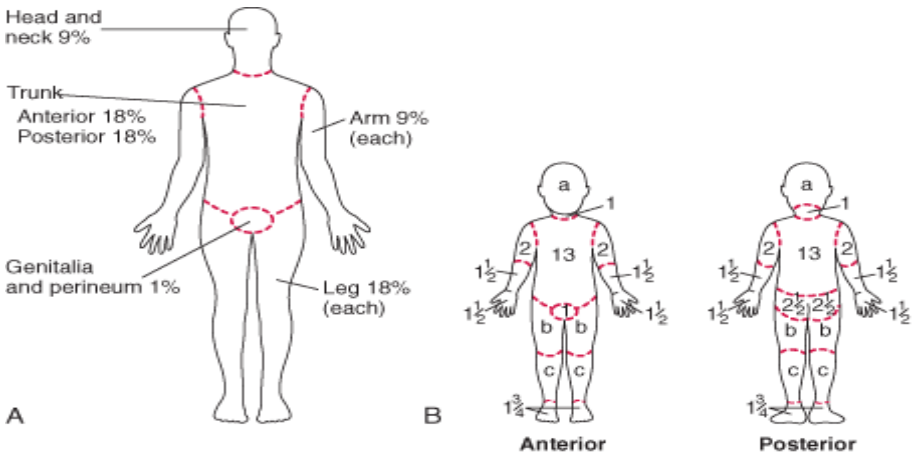
India, the second most populous country in the world with over 125 crore people, has an estimated annual burn incidence of 6-7 million. Burn remains the second largest group of injuries after road accidents. Nearly 10% of these are life threatening and require hospitalization. Approximately 25% of those hospitalized succumb to their injuries. Nearly 1 to 1.5 lakh people die from burns & nearly 2.8 lakh people get crippled, require multiple surgeries and prolonged rehabilitation.

Seventy percent of the burn victims are in most productive age group of 15 to 40 years and most of the patients belong to poor socioeconomic strata. While in developed countries, the incidence of burn and extent are decreasing significantly ,in India it is still on the higher side.

In spite of major advances in therapeutic strategies for the management of patients with severe burns, including improved resuscitation, enhanced wound coverage, infection control, and management of inhalation injuries, the consequences of a severe burn are profound and result in complex metabolic changes that can adversely affect every organ system. Management of a patient with a severe burn injury is a long-term process that addresses the local burn wound as well as the systemic, psychologic, and social consequences of the injury.

In situations where resources are limited (mass casualty, natural disaster), triage, stabilization, and transfer provide optimal outcomes. Outcomes for severely burned patients, particularly children or older individuals, who cannot be transferred for burn care are poor. Of the more than one million burn injuries incurred annually the majority are minor and can be managed on an outpatient basis

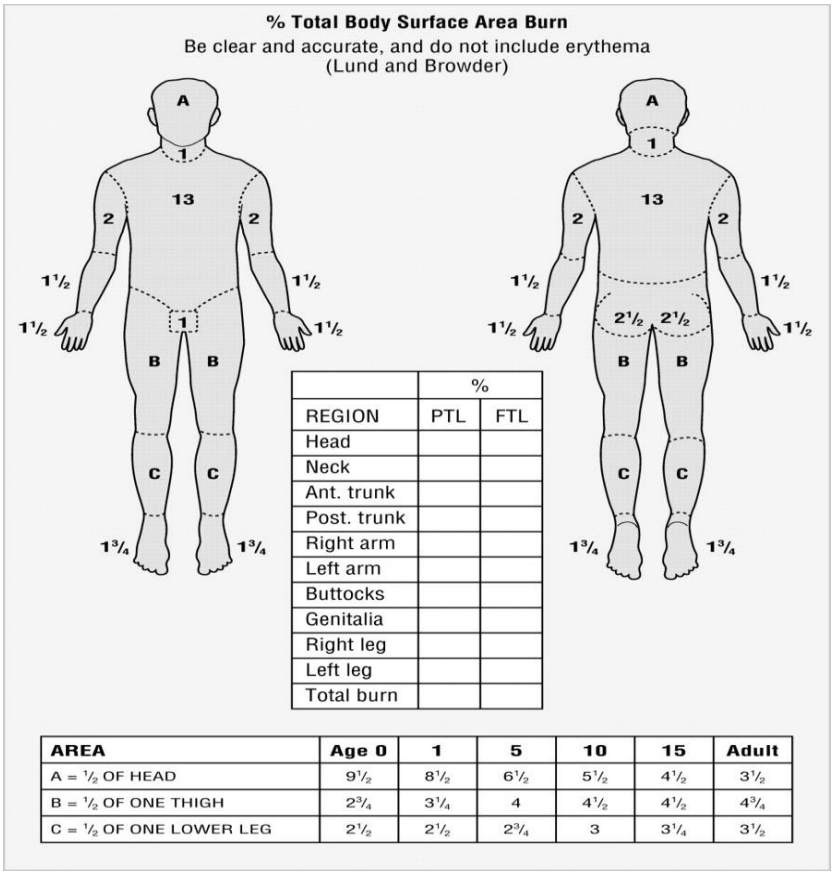
Accurate classification determines treatment — Burns are classified by total body surface area (TBSA) .There are many ways to estimate surface area burned. None of these are 100% accurate. Rule of Nine which was popularized by A.F. Wallace of Edinburgh remains the most popular method of describing the surface area burn. In this, body is divided into 11 equal parts making this 99% and 1% is given to perineum. (Figure 1)



Relative percentage of body surface area (% BSA) affected by growth

Figure-1 'Rule of Nine' for estimation of TBSA burned

In new borns and children, because of the larger size of head and small body surface area of limbs, the Rule of Nine is not applicable. Lund and Browder chart simplifies the calculation of total body surface area burn in children. This takes into account the variation in the body surface area of different parts of the body in different age group. For this, more elaborate chart was proposed by Lund and Browder which also takes in consideration the patient"s age for calculation of surface area of burns involved. (Figure 2).



	%	
REGION	PTL	FTL
Head		
Neck		
Ant. trunk		
Post. trunk		
Right arm		
Left arm		
Buttocks		
Genitalia		
Right leg		
Left leg		
Total burn		

AREA	Age 0	1	5	10	15	Adult
A = ½ OF HEAD	9½	8½	6½	5½	4½	3½
B = ½ OF ONE THIGH	2¾	3¼	4	4½	4½	4¾
C = ½ OF ONE LOWER LEG	2½	2½	2¾	3	3¼	3½

Figure-2 Lund & Browder chart

One closed hand of an individual is equal to his 1% body surface area. This hand must be of the person concerned who sustains burns. A hand consists of all the fingers and thumb brought together in extended position, which include palm and all the fingers. This is applicable universally in every age group. This is popularly known as the „Rule of Palm". (Figure 3).

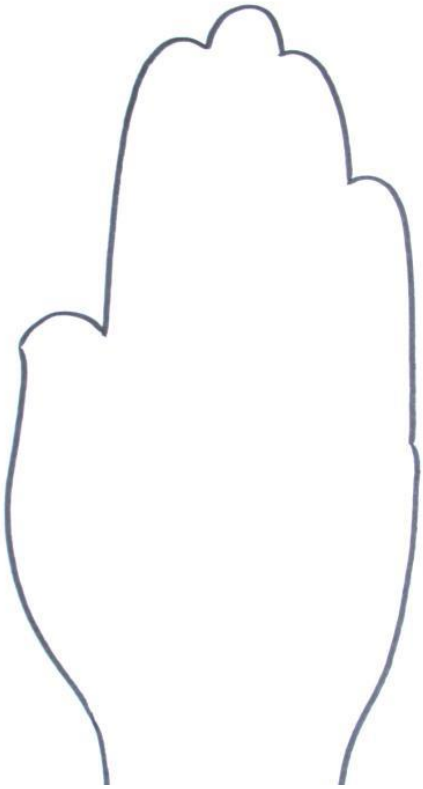
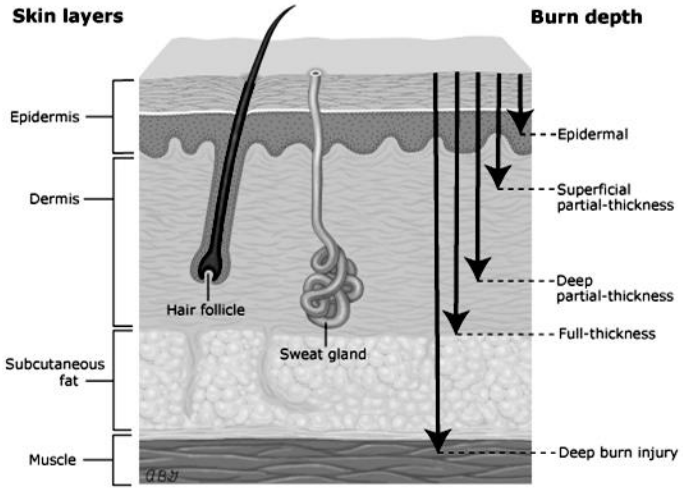


Figure-3Rule of Palm (1%) Understanding the Depth of Burn

CUTANEOUS BURNS CLASSIFICATION:



- **Epidermal (superficial; was first degree)** burns involve only the epidermal layer of skin.
- **Partial-thickness burns (was second degree)** involve the epidermis and portions of the dermis. They are characterized as either superficial or deep.
- **Full-thickness burns (was third degree)** extend through and destroy all layers of the dermis and often injure the underlying subcutaneous tissue.
- **Deep burn injury (was fourth degree)** extends into underlying soft tissue and can involve muscle and/or bone.

Treatment, prognosis, and disposition are largely determined by the size and location of all the partial and full thickness burns. Differentiating between superficial (first-degree) and partial-thickness (second-degree) burns is a key part of the evaluation.

The major metabolic derangements associated with severe burns rarely occur with minor burns. However, it is important for clinicians treating burns to be able to classify them accurately in order to ensure appropriate therapy.

PREVENTION OF BURNS-

Practically all burns are preventable if people are little cautious while using fire and hot objects and attempts are made to prevent it. Around 70% cases of burns occur in the most productive age group (15-35 years). Around 4 out of 5 burn victims are women & children. About 80% of all admitted cases occur due to accidents in kitchen. All kitchen burns occur due to:

- Lack of safe cooking devices(use of unlicensed gas cylinders & kerosene oil stoves)
- Leaking gas cylinders, regulators and connecting pipes
- Overcrowding(single room houses with kitchen adjacent to bed/play area or children)
- Floor cooking
- Poor socioeconomic status
- Use of unsafe cooking methods
- Ignorance among women(faulty habits like use of clothing to hold cooking pot, wearing loose chunnis and pallus)

Education about safety with fire and burns prevention should start early in childhood which will provide healthier and safer approach in future. In children, scalds remain the most common cause of burn injury, though child abuse cases by burning have also been reported.

Another mode of injury by chemical burns, apart from accidents, is vitriolage i.e. throwing of acid over somebody for seeking revenge and attempts to resolve disputes of love, land or business. Dowry burn (bride burning) is a major social evil in our country

High tension wires, close to homes and play areas may cause electrical burns, therefore one should remain away from these wires and unauthorized construction of houses should be discouraged. Household electricity may also cause major accidents. Keep the wires and sockets safe.

Burn Shock:

Burns is a mechanism of heat transfer from high source to a low source. In non animated object it goes in a predictable manner with more energy transfer from source at higher temperature to source at lower temperature. However, this response is not so linear in living creature and humans; being modulated by different body responses through many different chemical mediators.

In addition to gross changes seen at local site of burns there are marked circulatory changes in the form of increased capillary permeability. This increased capillary permeability in major burns is not confined to the site of burns alone but to the whole body. Exact cause of this increased capillary permeability is not clearly understood. At times it is so great that colloidal substance of molecular weight as great as 15,000 daltons are ready to escape out from capillaries to the extra vascular space. This is seen maximum in the first 12 hours and then slowly phases out but still remains high up to 24-36 hours.

This increased capillary permeability creates a situation of hypovolemic shock which is seen in the form of:

- Increased pulse rate (Tachycardia)
- Dryness of mouth and skin (Dehydration)
- Cold clammy extremities (Hypothermia)
- Fall of blood pressure (Hypotension)
- Decreased urine output(Oliguria)

Initially body tries to compensate this by generalized vasoconstriction and constriction of splanchnic circulation to maintain cardiac output. However, soon this compensatory mechanism fails if no attempt is made to correct the fluid loss.

Further, loss of covering envelope of the body increases the evaporative losses which may be as much as 20 times that of normal. Correction of this shock stage is essential and should be done as soon as possible. Main thrust remains to maintain intra vascular compartment, so that cardiac output can be brought to normal.

Crystalloid solutions are preferred over colloids for the first 24 hours as colloids will diffuse more in to ECF.

Parkland fluid resuscitation formula

Duration	Formula	Colloid	Crystalloid	Maintenance
First 24 hours from time of burn	4ML/KG/%BSA	NIL	RINGER LACTATE	NIL
Second 24 hours	2ML/KG/%BSA	NIL	RINGER LACTATE	NIL

Fluid therapy is monitored by maintaining hourly urine output. Best & least invasive method to see adequate perfusion is urine output. A urine output of 0.5ml-1ml/kg/hr denotes adequate perfusion. Thus, for an average person of 70kg, a urine output of 35ml/hour is regarded as adequate. For children, urine output of 1-2 (1.5)ml/kg/hr is considered optimal. Fluid loss is maximum in first 8 hrs, therefore half of calculated amount is infused in first 8 hrs and rest is infused in next 16 hours. All patients should be catheterized to monitor and see hourly urine output .

A BRIEF PRACTICAL GUIDE TO MANAGEMENT OF BURN PATIENT

1. **<u>On Site Management</u>**
    1. If patient"s clothes are on flames – ask him to stop, lie on the ground and roll to douse the flames or rescuer douses the flames with water or by wrapping with a blanket and removing the blanket as soon as the flames are put off.

2. Rescuer to check for ABC (airway, breathing and circulation) and deliver CPR accordingly.
3. Burned body part to be put under running water or immersed in a bucket of water for 10-15 minutes or till burning pain subsides. Do not immerse whole body in water. Do not use ice or ice cold water.
4. Cover with a clean cloth and shift to nearest medical centre.
5. Do not apply any local agent on the wounds.
6. If patient has extensive burns and is conscious, may be given sugar and salt solution orally.
7. In case of electric burns – switch off the main electric supply.
8. In case of chemical burns – wash the affected area with running water continuously for 20 min and then shift to hospital.

2. <u>Management in Burns Casualty</u>

1. As soon as patient arrives, asses for ABC and CPR to be given accordingly.
2. Removeallclothesandassess patient on extentanddepthofburnasper “Rule of nine” or Lund and Browder chart.
3. Weighthepatient.
4. Start wide bore I/V lines for infusing ringer lactate.
5. Remove all constricting objects like rings bangles etc.
6. Eschorotomy or fasciotomy to be done in circumferential burns.
7. Oxygeninhalationtobestartedifevidenceofinhalationinjury.
8. Dress the wounds with SSD or dressing material available.
9. GiveTetanusprophylaxis,preferablytetanusglobulin.
10. Admit all major burns in the ICU.
11. Minor burns to be discharged with prescription of oral pain-killers and fluid intake and instructions for early return and follow up visits.
12. Maintain the records in detail.

13. Police information to be sent.
14. Medico legal formalities to be completed.

3 .Management in ICU

1. I/ V fluids to be calculated and infused as per formula.
2. Monitor applied to measure vitals.
3. Assess airway for inhalation injury and intubate if required or give moist oxygen inhalation.
4. Catheterize the patient for monitoring urine output and aim at output of 0.5 – 1 ml /kg / hr in adults and 1 – 1.5 ml/kg /hr.
5. Assessextremities,neckandchestforcirculationincaseofcircumferential full thickness thermal burns or electrical contact burns. To give escharotomy/ fasciotomy incisions as per requirements to improve circulation or respiration.
6. Arterial blood gas to be recorded in inhalation injury.
7. Nil orally till patient is out of shock, and then the patient can start oral sips only. Increase fluid and start semisolid diet after 24 to 48 hours once patient recovers from hypovolemic shock phase.
8. ECG monitoring for electric burns patient is essential.
9. Ifperipherallinenotadequateputinacentrallineforfastfluidinfusionand CVP monitoring.
10. Chest physiotherapy and extremity positioning and physiotherapy should be started from second day onwards.
11. Hemoglobin, hematocrit , Serum electrolytes , KFT and Blood sugar should be done daily or as per requirement.
12. I/ V fluids to be continued as per daily losses and requirements.
13. Monitor intake output chart.
14. Dressing to be done with 1 % SSD, collagen or silver dressings depending on availability and changed every 3 -5 days as per indication.
15. Tangential excision should be performed within 3 to 5 days for deep dermal burns or to continue conservative management if extensive burns.
16. Shift to HDU or step down ICU once patient"s general condition and oral intake improve.
17. No antibiotics are needed during initial period.

18. Systemic antibiotic to be given based on symptoms, wound and blood culture sensitivity and ward antibiogram.
19. Oral or parenteral analgesics and sedation for pain management are prescribed as per requirement.

4. <u>Management in HDU and Ward</u>

1. Oral intake to be increased with high calorie and high protein diet. I/ V fluids to be supplemented as per intake / output chart.
2. Parenteral nutrition to be given based on oral intake.
3. Blood transfusion to be given as and when indicated.
4. Monitor blood investigations every 3rdday – haemogram, electrolytes, KFT, Blood sugar and serum proteins .
5. Dressings to be changed every 3rdto 5thday or earlier if needed after a shower.
6. Active physiotherapy for limbs to continue.
7. Once slough separates and raw area is healthy, to be taken up for split thickness skin grafting.
8. Once all wounds covered and patient mobile, may be discharged and called for follow up in OPD.

5. <u>Management in follow up OPD</u>

1. Dressings to be done as required.
2. Once all wounds have healed – advice for massage with oil or moisturiser, active physiotherapy, cervical collar, splints and pressure garments.
3. Check for compliance at regular intervals.
4. Counselingtobedone.
5. Psychological support and rehabilitation.
6. Secondary surgery for correction of deformities after six months or as per indication.

TEN COMMANDMENTS OF BURN MANAGEMENT

Acute burn care requires meticulous planning and attention to details. Often, small things escape attention and result in avoidable mortality and morbidity. Care of burn victim can be significantly improved if certain principles are adhered to. It has been proposed as "The Ten Commandments" of burn care. It is believed that these commandments will help and guide the young surgeon treating burns in far and remote corners of this vast continent.

Ten commandments are:

1. Maintain circulation and blood pressure (shock management)
2. Maintain airway
3. Increase body resistance
4. Avoid bacterial toxemia
5. Avoid auto-toxemia
6. Watch for renal complications and multiple organ dysfunctions
7. Maintain nutrition
8. Abide by principles of biomechanical physiotherapy and rehabilitation
9. Attend to psychological, emotional aspects and counseling
10. Analyze factors for reducing mortality.

Adherence to these principles and commandments can help us decrease the morbidity and mortality in this unfortunate set of patients.

::::::::::::::::::::

Dr.S.Rekha
Joint Secretary,
IMA CGP National HQRS

National Deworming Day 2022 – 10th February

National Deworming Day is a day dedicated to deworm all the school going children of the country, to give them a healthy digestive system and to improve overall health for a quality life.

Why do children in India Need Deworming

According to the WHO, around 220 million children (From 1 to 14 years) in India are at risk of STH (Soil Transmitted Helminth) infection.

Parasitic worms present in the soil enter people through the soles of their feet. They can also infiltrate our bodies through worm infested food consumption.

Infected children easily get sick, tired and lose their concentration level. They develop nutritional uptake problems like anemia and malnutrition.

Prevalence rate

It is found that some states in India are more STH Prevalent

> 50% (High)

Arunachal Pradesh, Uttar Pradesh, Sikkim, Chhattisgarh, Nagaland, Jammu & Kashmir, Dadra Nagar Haveli, Mizoram, Assam, Uttarkhand , Daman and Diu, Lakshadweep, Telangana and Tamil Nadu.

20 - 50% (Moderate) Delhi, Andhra Pradesh, Haryana, Karnataka, Himachal Pradesh, Kerala, Jharkhand, Bihar, Maharashtra, Goa, Odisha, Pondicherry, Punjab, Gujarat, Meghalaya, West Bengal, Tirupura.

< 20 % (Low)

Madhya Pradesh & Rajasthan

Steps taken by the Government

To combat the situation of worm infection in India, the Indian Government (Ministry of Health and Family Welfare) has launched the National Deworming Day (NDD) in February 2015 as part of the National Health Mission.

The aim of this program is to deworm all the children from 1 to 19 years and improve their well being.

All children of age group 1 to 5 years are dewormed at the Anganwadi and children of age group 6-19 years are dewormed in their schools. Unregistered or children out of school can receive tablets at the Anganwadi.

Children of age group 1-2 years are given syrup (albendazole 200 mg).

Children above 2 years of age are given one full tablet (albendazole 400 mg) to chew.

This year (2022) the National Deworming Day Campaign began on February 10th and ended on February 16th.

Practices to be followed other than deworming to prevent worm infestation

- Never use open defecation.
- Always use a toilet.
- Always wash hands with soap and water before eating and after using the toilet.
- Always keep the surrounding areas neat and clean.
- Always wear footwear while going out.
- Always drink clean water and consume safe food.
- Always keep food covered.
- Always have fruits and vegetables after washing with clean water.
- Avoid touching mouth, nose, with dirty hands.

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CERVICAL CANCER VACCINATION -THE NEED OF THE HOUR

Motto of this article-

- To emphasize on the routine use of cervical cancer vaccination against the hpv.
- Comprehensive review of universal screening ,vaccination along with awareness to prevent ca cervix
- Overview of the socioeconomic burden and globally a major public health threat that cervical cancer poses .
- The biggest question answered will be why at all should we as a nation let our females “die” when we can “protect.”

Disease course of hpv-the human pappiloma virus-

- Large number of women get hpv infection sometime during their life time (80% by the age of 50)
- Majority of the females do not have any symptoms and would clear the infection without developing any disease
- Few women about 7% develop precancerous lesions and cervicalcancer over a period of time(few months to 9 years)

Population at high risk-

- Multiple sexual partners
- Early age of marriage
- Young age at first sexual exposure
- Male partner sex.
- Apart from sexual behaviour-smoking and nutritional factors also contribute to it.

Preventive strategies-

- Screening-well organized cervical screening programmes and widespread good quality cytology(pap smear) can reduce cervical cancer incidence and mortality,however competing health care priorities,insufficient financial resources ,limited number of trained providers have made high coverage for cervical cancer screening in most low and middle resourced settings difficult to achieve.
- Vaccination-this is where and why we talk about vaccination to reduce the cervical cancer burden considerably without much training and learning curve involved.

Rationale-

- Women previously infected with a particular type are unlikely to become reinfected by the same type ,because of immunity largely provided by antibodies targetted against the major papilloma virus capsid protein l1.
- These antibodies block the interaction between infectious virions and their epithelial receptor,preventing viral access.when made in the laboratory ,l1 protein self assembles into virus like particles(vlps) that are morphologically identical to hpv and highly immunogenic but not in themselves infectious because they lack the viral genome .
- Natural hpv infection induces a weak immune response and does not offer full protection against new hpv infection.
- Vaccines induce high immune response than natural infection.
- Vaccination is the only form of primary prevention for ca cervix.

Types of vaccine-

- Bivalent vaccine-against strains -hpv 16 and 18
- Quadrivalent vaccine-against strains-hpv 6,11.16.18
- Nanovalent vaccine-against additional 5 strains-31,33,45,52,58

Efficacy-

The vaccinesare 100% effective in preventing high grade cin and cervical adenocarcinoma in situ.

Dosage-3 doses

- Today
- Month 2
- Month 6

Target population-

- Fda recommends 9 to 26 years age females (preferably 11-13 years)
- Can be offered to females till 45 but with limited benefit.
- Catch up vaccination –no age limit.
- Quadrivalent hpv vaccination even recommended during lactation and immediate postpartum period.
- Other anogenital diseases linked to hpv –vulval ca,vaginal ca, anogenitel warts,penile ca,anal ca and orophayngeal ca..hence also recommended for boys.

Why is it best to immunise adolescents-

- Immunising before exposure can give per-protocol efficacy
- Higher immune response in adolescents than young adults
- Only two doses are required for full protection so more cost effective.

The indian scenario-

- India is the youngest country in the world!!
- Adolescent population 250-260 million
- These millions are awaiting our attention for cervical cancer prevention-

World's approach to fight ca cervix by vaccination-

- Bhutan,malaysia,panama,mexico,argentina has introduced hpv vaccination as a part of the national immunisation schedule '

Challenges for universal vaccination-

- Despite of the 100% protection it offers,worldwide vaccination programes are still years from realisation.
- To have maximum impact vaccination we would need to target young women prior to the onset of sexual activity.
- Sensitive public health campaigns would be required to convince parents to allow their teenage daughters to be vaccinated against a sti.
- Reaching women in underdeveloped settings,where already outstretched budgets that are struggling to deliver food,water and basic health care may make hpv vaccination unaffordable .

What needs to be strongly considered-?

- The potential of hpv vaccine to reduce the worldwide incidence of cervical cancer is unprecedented.
- Universal vaccination protocols require careful and strategic financial planning in both developed and more so in underdeveloped settings.
- Triad of awareness,screening and vaccination needs a mass scale public programme implementation for the desired outcome.
- unlike other cancers since ca cervix is preventable we need to educate and empower women to prioritise their health and reinforce proactive measures.

The grave scale of the problem-

- Without further preventive measures ,deaths from cervical cancer are predicted to jump four fold to over a million a year by 2050 as a result of explosion in hpv infection rates across the world with more and more sexually active young adult population.

Message should be loud and clear….

- We don't need to cure cancer (curative treatment involves much higher socioeconomic burden) if we can prevent it

- Don’t wait –vaccinate is the mantra.
- Pursue,prevent,protect and prepare

Conclusion –

- 27% of the world burden of cervical cancer is seen in india
- Since diagnosed in the late stages ,significant mortality is attributed to it.
- Cervical cancer preventive measures in our country hasn’t even reached the tip of the iceberg
- Hence primary preventivion with vaccination is the basis of cancer control.

“supporting th fighters ,admiring the survivors,honoring the taken and never ever giving up hope…..”

“an ounce of prevention is worth a pound of cure”-benjamin franklin.

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INJURY REPORTING BY MEDICAL PRACTITIONERS

An injury is any harm, illegally caused to any person in body, mind, reputation or property (sec 44 IPC). A wound is a break of the natural continuity of any of the tissues of the living body [1].

Most of times a doctor investigates foul play and issues a wound certificate in a Medico-Legal Case. Wound certificate is a document prepared by the doctor in all medico-legal cases. Wound certificate is a kind of medico-legal report [2].

A medico legal case of injury or ailment where attending doctor after taking history and clinical examination of the patient thinks that some investigations by law enforcing agencies are essential. Even though a wound certificate is an important aspect in any medico-legal cases, errors in issuing and documentation of these certificates is not something very uncommon. These certificates play very important role and the error can lead to many fatal consequences. Issuing of wound certificate becomes important in case of injuries which include road accident, suicide, homicide or grievous hurt (sec 320 IPC) [3].

The clauses under Sec 320 IPC are as follows

i. Emasculation.
ii. Permanent privation of the sight of either eye.
iii. Permanent privation of the hearing of either ear.
iv. Privation of any member or joint.
v. Destruction or permanent impairing of the powers of any member or joint.
vi. Permanent disfiguration of the head or face.
vii. Fracture or dislocation of a bone or tooth.
viii. Any hurt which endangers life or which causes suffering during the space of twenty days in severe bodily pain, or makes him unable to follow his ordinary pursuits.

Very often interpretation of an injury under grievous or simple can become a very cumbersome task for a doctor specially in a busy casualty setup. The given write up aims to provide a simple yet methodical approach for the same.

Format of wound certificate is as follows:

- Pre-amble indicate date, time, place of examination and name, address and occupation of patient.
- Body includes complete description of the injuries
- Post-amble includes

Nature of injuries- simple or grievous.

Weapon used- blunt or sharp or firearms, etc.

Duration of injuries- characteristics of external injuries.

To be signed with full name of attending physician in capital letters.

Two identification marks must be taken. One identification mark is more likely to lead to mistaken identification, as it can be duplicated in another person. Two identification marks are less likely to lead to errors. Three would cause still less errors, but it is not practical to take more than two. They should be on exposed parts, and not on hidden parts, so patient faces no embarrassment in court where these marks may be tallied [3].

All injuries, however insignificant they may appear, should be recorded. Proper, adequate, and complete documentation is very necessary for all medico-legal work. Remember the maxim: Legally, only those injuries are present that have been recorded. Whatever has not been recorded was not present. Similarly, whatever procedures have been recorded were performed; whatever was not recorded was not performed.

Type of each injury (e.g. whether it is an abrasion, contusion, laceration, incised wound, stab, burn, scald, fracture, dislocation of tooth etc.) should be noted. Systematic entries - In order not to miss any injury, a systematic plan should be adopted. The best is to go round the patient in this manner; start with head and neck → right upper limb → right lower limb → left lower limb → left upper limb → front of the chest and abdomen → genitalia → back of chest and abdomen. Lens

must be used in order to be able to differentiate between incised and incised looking lacerated wounds, or for noting other minute details such as singeing of hairs around firearm entry wounds.

Size of each injury should be noted, after measuring them with a ruler. No reliance should be made on guesswork. Shape of injuries - whether linear, triangular, circular, elliptical, oval, irregular or any peculiar shape. Direction of wounds - Whether horizontal, vertical, oblique or in any particular direction.

Exact location of the injury in relation to important landmarks (e.g. midline, navel, nipple, outer canthus of the eye, a joint, a bony structure [e.g. knuckle]) should be noted. Distance from landmarks should be noted. Avoid technical terms as far as possible (e.g. instead of writing “medial malleolus”, write “inner bony prominence of the ankle”). There is nothing wrong in writing technical terms, and if the doctor cannot think of a suitable common name, he can use technical terms too. Writing in layman’s language makes it more comprehensible to laymen like judges and lawyers

Age of each injury should be noted after noting gross changes in the wounds (e.g. color of a bruise, condition of scab in abrasions, infection etc.). Routine histological, histo-chemical and immuno- histochemical examinations are not possible in casualty setup, and should be undertaken only in extremely sensitive cases.

The following colour changes may help in estimation of time of injury.

Time of injury from abrasion

Bright Red	Fresh
Red Scab (Dried Blood/Serum)	12-24 Hours.
Reddish Brown Scab	2-3 Days
Dark Brown Scab (Healing From Periphery)	4-7 Days
Scab Falls Off (Complete Healing)	10-14 Days

Time of injury from bruises

Fresh (Red)	Fresh	Oxygenated Hemoglobin
Red to blue	One day	Deoxygenated Hemoglobin
Bluish black to brown	2-4 Days	Hemosiderin
Green	5-7 Days	Haemotidin
Yellow	7-10 Days	Billirubin
Completely disappears	14 Days/ 2weeks	Normal

Against each injury, its nature should be noted (e.g. simple, grievous or dangerous). If nature of injury is not immediately apparent, patient must be kept under observation and following entry made in the relevant column “patient under observation.” Similarly, if X-rays or other investigations have been ordered and their reports awaited, following entry should be made “Awaiting X-ray report.”

Conclusion

Documentation is very essential - condition of the patient, consent, procedure performed or treatment given, etc. at that instant time & do not leave anything for completion later on. It should be remembered that: “If you have not documented it, you have not done it.”

Knowledge is power and knowledge about legal duties, liabilities and rights is the only way to safeguard ourselves during current climes of strife and litigation. In repetition, meticulous record keeping is the one talisman which will help guard against spurious and malafide complaints, as recorded facts speak bear witness in a court of law. Following standard procedural examination/ management protocols in medico legal situations go a long way in securing the doctor against malpractice.

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ENCRUSTED FOLEYCATHETERTIP-ACASEREPORT

Abstract

Introduction:Peri catheter concretion or encrustation, is an unusual cause ofdifficulty in removal of the catheter.**Case Report:** A 70-year male patient presented with complaints of lowerabdominal distension and poorly draining foley's catheter.Patient wascatheterizedthree months back for acute retention of urine.Patient failed tofollow up for regular interval change of catheter.CT scan revealed calcifiedfoley catheter tip and patient was taken for suprapubic cystostomy and thecalcifiedfoleycatheterwasremoved.

Conclusion: Surgical removal is a treatment of choice in semi urban setup. Aseptic catherization, frequent catheter change and proper patient counselling helps to prevent this complication.

KeyWords: urethralcatheterization,encrustedtipurinary catheter,surgicalremoval

INTRODUCTION

In many surgical and medical conditions, urethral catheterization is the first method to drain the bladder. In a case of acute retention of urine,catheterizationwith a foley catheter is the commonly used choice of initial treatment. Long-termuse ofindwelling foleyscatheterization is mainly seen in chronically debilitatedindividuals.Urinary tract infection,trauma to urothelium, creation of false tractanddislodgmentarecommonproblemsassociatedwithit.However, long term indwelling catheterization may lead to encrustations around the tip.[1]

CASE REPORT

A 70-year-old ambulatory male patient presented to the casualty departmentwith a retained 18 Ffoleys catheter.The patient was catheterizedthree months back in a peripheral hospital for acute retention of urine.Since then,the patient didnot changethe catheter.He did not have any history of previous surgery. On the day of presentation, the catheter stoppeddraining urine and multiple attempts for removal at a peripheral hospital wastried. Onabdominalexamination, patienthadasuprapubicbulgesuggestive of distended bladder. Per rectal examination revealed prostatomegaly. Ultrasonography of KUB was suggestive of a calcification in the bladder and anultrasoundguidedpuncturewas not successful.

Immediately the patient was shifted to operating room for as uprapubiccatheterization.

Post suprapubic catheterization, turbid urine was drained. Subsequently, blood investigation was normal.Urine cultureand sensitivity revealed growth of Proteus mirabilis. NCCT KUBrevealedcalcifiedfoleys catheter tip andGradeIIprostatomegaly.

Patient was taken for suprapubic cystostomy under Spinal anesthesia, intraoperatively an encrustedfoleyscatheter was identified and was removed by cutting the tip and remaining catheter taken out per urethra, a new 18 Ffoleys urethral catheter was introduced and post operatively on Day14 catheter was removed and patient was able to pass urine comfortably and was discharged.

DISCUSSION

Urinary catheterization remains a frequently performed technique in any medical or surgical condition as required. Use of indwelling catheters are mainly seen in chronically debilitated patients. But long-term catheterizationcomesat thecostofcomplications likeinfection, bladder spasms, catheter encrustations, andretainedcatheters.Theencrustationcanbeeitherintraluminal orextraluminal.

Proteus mirabilis is the main microorganism responsible for the encrustation ofcatheter[2]. The main route of infection of the catheterized urinary tract is through the urethra along the outer surface of the catheter, as also sometimes ascending though the lumen from the urine bag into the bladder[3].Removal of a retained foleys catheter forcefully has a greater chance of injuringthe fragile urethral wall resulting in bleeding and stricture formation[4].Intra luminal lithotripsy is useful in intraluminal encrustations[5]. ESWL has been used to fragment encrustation over the retained Foley catheter balloon. Intermittent balloon deflation and reinflation to interrupt the formation of encrustations and bladder irrigation with an acidic solution are also recommended for long term indwelling catheters[6].Use of triclosan instead of Normal saline to inflate the foleycatheter balloon prevents encrustations in long term indwelling catheters[7]. Surgicalremoval was the treatment of choice in this patient as advanced urological setup was not available in our institution

CONCLUSION

Encrusted Foleys tip catheterization though a rare complication can be avoidedbya propercounsellingofthepatientfor regular interval changeof catheter, aseptic catheterization, early treatment of UTIs. Thetechnique of surgical removal of encrusted foleys catheter by suprapubiccystostomyis the treatment of choice incenters lacking advanced urological setup or experience.

Conflicts of interest:

There is no conflict of interest and the authors have not received any financial support or sponsorship for this study.

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ENDURING WONDER VITAMIN -E

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Someone said " A coincidence is a small miracle where God chose to remain anonymous ". Here is one such remarkable coincidence .It is vitamin -E . Vitamin E was discovered by Herbert Evans in 1923 during the course of fertility studies in female rats . Vitamin E is a fat soluble,heat stable vitamin which has eight compounds in total, of which only one compound is useful to humans. This is also known as alpha-tocopherol and plays a vital role in the antioxidation process and is believed to improve the overall ageing process.

Various types of tocopherols have been detected in natural sources like alpha,beta ,gamma and delta forms. Of these d-form of alphatoco has the maximum biological activity. Though d-form of alphatocopherol is the most active, the commercially available form is usually a racemic mixture of d and l form, designated as " RACE-A-TOCOPHEROL " in the form of esters-acetate . These esters are most stable. As natural tocopherol is thermolabile and sensitive to atmospheric oxygen, significant losses occur during excessive cooking.

SOURCES : Natural food sources contain enough amount of this vitamin to meet normal daily requirements. It is widely found in vegetable oil, cotton seed oil, legumes,whole grains, fortified cereals, nuts, seeds, seafood,poultry,meat, eggs, soyabean oil, maise,spinach,lettuce, low fatmilk, butter .

ABSORPTION : Vitamin E that is absorbed by the intestine in presence of bile and pancreatic juice to the liver, from where only alpha-tocopherol gets released into the system in small amount . Other seven compounds are excreted by liver. Only 20-40% of orally ingested tocopherol and/or its esters are absorbed. The efficiency of absorption is enhanced by the simultaneous digestion and absorption of dietary lipids.

METABOLISM : Vitamin E circulates in blood and lymph bound to betalipoproteins .Liver,adipose tissue and muscles represent the major storage of vitamin E. Vitamin E undergoes very little metabolism. Less than 1% of orally ingested dose is excreted in urine. Active vitamin E controls the oxidation process in cells and prevents the release of free radicals, which is the culprit in all inflammatory processes which can cause heart disease,diabetes,cancer and stroke. Vitamin E is far less toxic than other fat soluble vitamins. Daily intake in the range of 200-800mg is generally safe. Nausea, flatulance,diarrhoea may occur at doses in excess of 1000 mg . Vitamin E may interfere with the action of iron .Hence iron preparation should be taken atleast 8-12 hours before vitamin E.

DEFICIENCY SIGNS AND SYMPTOMS :Vitamin E deficiency is seldom encountered in healthy adults. However evidence of vitamin E deficiency is known to occur in patient with pancreatic diseases, cystic fibrosis or hepato-biliary disorders,thalassemia, abetalipoproteinaemia . The usual signs of deficiency includes degeneration of testes, abnormalities of gestation, regression of ovary, decrease egg hatchability,muscular dystrophy , liver necrosis, hemorrhagic diathesis and anaemia.Recent studies

has shown that vitamin E deficiency can cause neuromuscular symptoms like ataxia, reduced vibratory sensation, leg cramps, facial paresis . Viamin E deficiency in neonates is conceivable in view of its poor placental transfer. This is more so in premature infants fed with infant formula rich in PUFA (Polyunsaturated fatty acid) and iron . They need vitamin E as they are liable to develop haemolytic anaemia.

BENEFITS :

* Vitamin E is shown to dilate blood vessels and prevent platelet clogging.
* It is useful in preventing and treating diabetes and its related complications.
* The nervous system diseases like Alzheimer's, Parkinson, epilepsy can benefit from vitamin E. It reduces cognitive decline.
* Women are benefitted from premenstrual cramps, painful periods, hot flashes with breast cancer, eclampsia during pregnancy and other pregnancy complications.
* It improve endurance, energy levels, muscle strength and reduce muscle damage.
* The antioxidant effect is useful in reversing ageing skin changes, including wrinkles and fine lines.
* It is useful to control hair loss, which could be due to reasons like chemotherapy or a side effect of drugs .
* It is useful in treating allergies, asthma, respiratory infection and skin allergies.
* Eye diseases like cataract and muscular degeneration which are age related can be controlled with vitamin E .

CONCLUSION : Vitamin E has the interesting property of reducing tissue oxidation and has been recommended for therapeutic use in certain ageing related abnormalities and certain high risk patients like atherosclerosis, fibrocystic breast disease, facial paresis, ataxia, diabetes. Hence viamin E can be described as one of the main " Protective" vitamin for the body. Noble prize winner in Medicine (1937) Prof. Szent Gyorgi said "Vitamins are what make you ill if you do not take them ".

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FOOD ALLERGY

Adverse reaction to foods can be true (immunologically mediated) food allergy or non immunological adverse reactions to food like food poisoning , food intolerance. A food allergy is an adverse health effect arising from a specific immune response that occurs reproducibly on exposures to a given food. In some cases, allergies experienced during childhood may resolve in adulthood. It is usually self diagnosable, Lab Test imaging rarely required. It can last for years or be Life Long.

Prevalence:-

Though food allergy has been noted in the urbanized western world for sometimes. On the basis of recent studies, food allergy is estimated to affect more than 1% to 2% and less than 10% of the population. More than 10 million case per year in India. The Euro Prevall-INCO study estimated the prevalence of food allergy among adult in southern India to be 1.2% with cow milk accounting for 0.5% and apple 0.5%. The overall, current studies estimate the prevalence of food allergy at 5% in adults and 3% in children. Although more than 170 foods have been identified as triggers of food allergy, those causing most of the significant allergic reaction include milk, egg, peanut, trenut, fish, shellfish, wheat, soy and seeds.

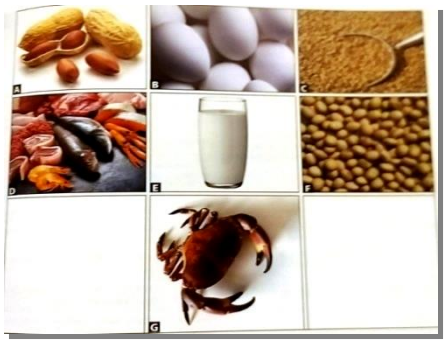

Fig-0

Pathogenesis:-

Food allergies are basically due to immune responses to food proteins. It is predominantly caused by IG-E mediated and / or cell mediated mechanisms. On exposure to certain allergens in susceptible individuals, food specific IGE antibodies are formed that bind to receptor of mast cells, basophils, macrophages and dendritic cells. When food allergens penetrate mucosal barriers and reach cell-bound IGE antibodies, mediators are released which produces symptoms of immediate hypersensitivity. These activated mast cells and macrophage may release several cytokines that attract and activate other cells, such as eosinophils and lymphocytes , leading to prolong inflammation.

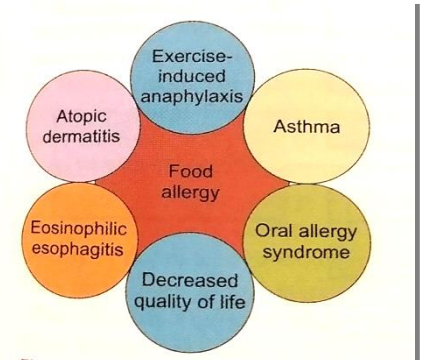

Fig. 1: Comorbidities with food allergies.

Symptoms:-

Variety of clinical sigs and symptoms can occur in food allergy. For some people, an allergic reaction to a particular food may be uncomfortable but not severe. For other people, an allergic food reaction can be frightening and even life threatening. Reaction can occur in minutes to hour. Rarely, symptoms may be delayed for several hours.

The most common food allergy signs and symptoms include:

- Tingling or itching in the mouth.
- Hives, itching or eczema
- Swelling of the lips, face, tongue and throat or other parts of the body.
- Wheezing, nasal congestions or trouble breathing.
- Abdominal Pain, diarrhea, nausea or vomiting.
- Dizziness, lightheadedness or fainting
- Anaphylaxis

In some people food allergy can trigger a severe allergic reaction called anaphylaxis This can cause life threatening signs and symptoms including, constriction and tightening of the

airways, A swollen throat or the sensation of a lump in your throat that makes it difficult to breathe, shock with severe drop in blood pressure, rapid pulse, dizziness, lightheadedness or loss of consciousness.

Pollen Food allergy Syndrome:-

Also known as oral allergy syndrome is a form of localized IGE mediated allergy, usually to raw fruits or vegetables and confined to the lips, mouth and throat. It most commonly affects patients who are allergic to specific pollens mugwort , Birch Pollen, Ragweed pollen, Grasses etc. Symptoms include pruritus and / or tingling of the lips, tongue, roof of the mouth, and throat with or without swelling. Systemic clinical reactions are rare .

Exercise-induced food allergy:-

Food dependant, exercise-induced anaphylaxis should be considered when ingestion of casual food or foods and temporally related exercise result in symptoms of anaphylaxis. Symptoms only occur with ingestion of casual food or foods proximate to exercise and that ingestion of the food in the absence of exercise will not result in anaphylaxis.

Common conditions that can cause symptoms mistaken for a food allergy include:-

- Absence of an enzyme needed to fully digest a food eg lactase enzyme deficiency.
- Food poisoning , which caused by bacteria.
- Sensitive to food additives eg sulfiter used to preserve dried fruits, canned goods and wine can trigger asthma attack in people with sensitivity to food additives.
- Histamine toxicity.
- Celiac disease, like a food allergy, celiac disease does not involve immune system response, but it is a unique reaction that's more complex than a simple food allergy.

Diagnosis:-

A through history and physical examination is the most important Part in the assessment. The history is especially important in evaluating acute systemic or anaphylactic reaction. The following facts should be established –

- Food suspected of causing the reaction and the quantity ingested.
- Interval between ingestion and the development of symptoms.
- Types of symptoms
- Whether other inciting factors, such as exercise, are necessary.
- Interval from the last reaction to the food.
- A diet diary can be helpful in identifying a specific food as the causative agent.
- Allergy skin prick tests and in vitro laboratory tests are useful for demonstrating IGE sensitization.

The Gold Standard of food allergy testing is double blind, placebo controlled challenge. This should only be performed in a monitored setting where a severe reaction can be immediately treated. The patient is given increasing doses of suspected food at interval during constant observation. Once the top dose is reached the patient is observed for period of time, anywhere from 2.5 to 4 hours for allergic symptoms.

Use of total severe IGF measurement, intradermal tests, patch tests and basophil activation tests are not recommended.

Factor's Responsible for sever food reaction :-

- Alcohol or aspirin intake increase the intestinal Permeability.
- Associated with asthma has higher risk for food induced anaphy laxis.
- Stress, emotion, exercise.
- Concomitant viral or bacterial infection increases the chance of severity of food allergies.
- Angiotensin enzyme inhibitor and beta blocker can impair the body's compensatory response to hypotension.
- Mensturation – decrase the threshold.
- Large amount of ingested antigen (food)

- Depending on oral antihistamines alone for treating the symptoms.
- Not using adrenaline or delayed administration of adrenaline.
- Ingested along with alcohol.

Treatment:-

The only proven therapy for food allergy is strict elimination of the offending food. But complete elimination of common foods (milk, egg, soy, wheat, rice, chicken, fish, peanut) is very difficult because of their wide spread use in a variety of processed foods. This require extensive education and work on the part of the parents and any other caregiver, including baby sitter, grandparents etc. and includes reading all food labels as well as taking special care when ordering foods in restaurants, notifying schools regarding snacks/meals etc. Parents of younger children with food allergies should be trained to identify early allergic symptoms and should have antihistamines and epinephrine available at all times.

Other emerging therapeutic options:-

1) Food oral immunotherapy
2) Omalizumab

Prevention of food allergy:-

- Exclusive Breast feeding upto 6 months of age
- Introduction of complementary food after 6 months according to normal standard increasing practices and nutrition recommendation for all children irrespective of atopic heredity.
- Early dietary introduction of potentially allergenic foods may prevent the development of food allergy.

Problems of food allergy:-

- Ignorance of practitioners about food allergies.
- Difficulties in diagnosing food allergies.
- Not able to differentiate food allergy from intolerance or food poisoning.

- Multiple allergies in some patient.
- Improper history given by the patient.
- Artificial foods contain hidden allergens.
- Pscudo allergens in the preservative of the food.

Prognosis:-

Prognosis of food allergy is dependent upon the type of food. It is complex, Onset of food allergy before 3 yrs of age will overgrow, whereas onset after 3 yrs of age will persist. As child get older, they outgrow allergy to milk, soya, egg and wheat but not to peanut, trenut and shellfish. Infant with non-IGE mediated food allergies respond favorably and they outgrow. However, celiac disease is not outgrown and persists lifelong. Children with food allergy are to be evaluated periodically to determine whether they developed tolerance or not.

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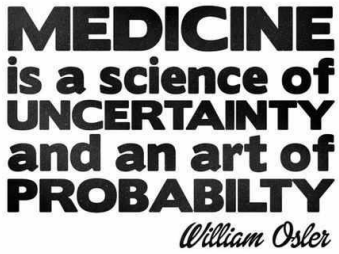

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The Red Cell indices and the need to switch to a Complete Blood Count from Routine Blood examination

The R/E blood- or the routine examination of blood, usually consisting of the Hemglobin, Total Leucocyte Count, Differential Count and the Erythrocyte Sedimentation Rate is an investigation which is probably one of the most prescribed by clinicians all over. However, Routine blood Examination- R/E blood is not a standard term, though it has become a convention to write as such. When prescribing the counts, its therefore always more prudent to request for a full blood count or complete blood count (FBC/CBC) with a peripheral smear study. A CBC with a peripheral smear is one of the most vital investigations in day-to-day practice, as it is one of the most informative as well, helping the clinician to diagnose a varietyof diseases at a pretty low cost.

The difference between a conventional “R/E blood” and a CBC is in the number of parameters reported by the pathologist, the most important of them being the Red Cell Indices. The red cell indices are Mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), and mean corpuscular hemoglobin concentration (MCHC). These can also be counted and calculated from a haemocytometer but with the introduction of automated cell counters nowadays, these values are reported automatically by the machine, the principle of which will be beyond the scope of this discussion here.

MCV defines the size of the red blood cells and is expressed as femtoliters (10^{-15}; fl) or as cubic microns (μm^3). The normal values for MCV are 87 ± 7 fl. The MCV is higher than normal when red blood cells are larger than normal (macrocytosis). Macrocytic anemia can be caused by, Vitamin B-12 deficiency, folate deficiency, chemotherapy, preleukemia etc. The MCV is lower than normal when red blood cells are too small (microcytosis). Microcytic anemia may be caused by iron deficiency, thalassemia, lead poisoning, chronic diseases MCH quantifies the amount of

hemoglobin per red blood cell. The normal values for MCH are 29 ± 2 picograms (pg) per cell. Anemias with low MCH are called hypochromic anemias, the most common of them being iron deficiency anemia.

MCHC indicates the amount of hemoglobin per unit volume. In contrast to MCH, MCHC correlates the hemoglobin content with the volume of the cell. It is expressed as g/dl of red blood cells or as a percentage value. The normal values for MCHC are 34 ± 2 g/dl. This index is usually fairly redundant to change over a wide number of conditions, but can sometimes be increased in autoimmune hemolytic anemia, hereditary spherocytosis etc.

With most laboratories now having automated cell counters, there is another parameter called the Red Cell Distribution Width (RDW), which is a quantitative measure of the anisocytosis, and can help diagnosing different types of anemia in conjunction with the red cell indices. RDW represents the coefficient of variation of the red blood cell volume distribution (size) and is expressed as a percentage. The normal value for RDW is 13 ± 1.5%.

	Red cell size as defined by MCV		
RDW	**Decreased (microcytic; low MCV)**	**Normal (normocytic; MCV = N)**	**Increased (macrocytic; highMCV)**
Normal (little orno anisocytosis)	Heterozygousthalassemias Anemia of chronic disease (hypoproliferative)	Poor iron utilization Acute blood loss Enzyme defects (e.g., G6PD deficiency) Acute hemolysisLiver disease	Liver disease Aplastic anemia Myelodysplastic syndrome
Increased (anisocytosis)	Iron deficiency Red cell fragmentation	Early iron deficiency Early megaloblastic Sideroblastic Myelophthisis Combined deficiencySickle cell anemia	Megaloblastic Sideroblastic Myelodysplastic syndrome Secondary to chemotherapy

Among the microcytic hypochromic anemias, the most common are iron deficiency anemia (IDA) and beta thalassemia trait (*β*-TT). Distinguishing *β*-TT from IDA has important clinical implications because each disease has an entirely different cause, prognosis, and treatment. Misdiagnosis of *β*-TT has consequences for potential homozygous offspring.

To differentiate between beta thalassaemia trait (BTT) and iron deficiency anaemia (IDA), physicians need a battery of tests including estimation of HbA2, peripheral blood film, serum ferritin, iron, TIBC (total iron binding capacity) levels and transferrin saturation. But these are relatively expensive, time consuming and sophisticated techniques. Red blood cell volume distribution (RDW) curves generated easily by electronic cell counters and can reliably distinguish microcytosis caused by IDA and *β* -TT. Two indices, particularly the Red Cell Distribution Index and the Mentzer index have been shown to have sensitivity and specificity in the range of 70-90% by various studies in differentiating the two.

The **Mentzer index,** described in 1973 by William C. Mentzer, is the MCV divided by the RBC count. If the result is greater than 13, then iron-deficiency anemia is said to be more likely and if less than 13, thalassemia is said to be more likely.

RDWI has proven to be a reliable discrimination index in the differentiation of βTT and IDA. RDWI can be easily calculated as (MCV x RDW /RBC). A value of less than 220 points towards *β*-TT and values above 220 point towards IDA.
However, we need to be aware of erroneous results and the shortcomings of cell counters,which can be caused by various preanalytical and analytical factors, a few of which are as below-

- In *red cell agglutination*, doublet erythrocytes are counted as one, and larger clumps are not counted as red blood cells at all. This leads to a "decrease" in red cell count and a falsely elevated MCV. Determination of the hemoglobin value is not affected. Prewarming the sample eliminates these spurious values.
- In *hyperglycemia*, red cells are transiently hypertonic in relation to the isotonic diluting fluid, resulting in swollen cells and an elevated MCV. This can be avoided if some time is allowed for equilibration after dilution.

- Hemoglobin is quantified based on its absorption characteristics. Conditions such as *hyperlipidemias*, hyperbilirubinemia, a very high white blood cell count, and high serum protein can interfere with this measurement and result in falsely elevated hemoglobin values.
- Presence of immunoglobulins or fibrinogen precipitated by low temperatures in the blood sample leads to interference with cell counts, resulting in spuriously increased white blood cell count and sometimes small elevations in hemoglobin, hematocrit, red blood cell count, and a slight decrease in MCV. Prewarming the sample to 37°C will correct the artificial values.
- When the values of hemoglobin, red cell count, and MCV are affected, MCH and MCHC also become abnormal, since these indices are calculated and are not directly measured.

In conclusion, the red cell indices are invaluable in classifying anemias and formulating proper management strategy. By prescribing an “R/E blood”, we miss out on these important parameters, and hence, its probably time we all start asking for a complete blood count (CBC/FBC), wherever possible.

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Dr. Laksheswar Bhuyan,
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Elderly Surgical Patient-Pre-operative Assessment

The life expectancy is gradually increasing globally. It is probably because of more health awareness among the people and advancement in medical science in spite of all odds. It is estimated that by 2030, nearly 20% of the population will be over 65 years of age. As per survey elderly consume a significant portion of health care resources. This increases in number of surgical procedures performed in elderly patients places a growing burden as elderly surgical patient have shown to have increased length of hospital stay, higher total hospital costs and higher incidence of postoperative complications when compared to younger patients. The advanced age is associated with higher incidence of underlying co-morbidities. Advanced age is an important predictor of pre and post-operative morbidity and mortality. So greatest pre-operative risk factor for poor post-operative outcome is not chronological age alone but the sum of co-morbidities. As a result, the pre-operative evaluation of this patient population is not only essential to minimise the risk associated with surgical procedures but also provides an opportunity for a comprehensive geriatric assessment.

The physiologic changes in the elderly patient population that predispose them to complications and system-based approach to appropriate pre-operative evaluation of cardiovascular, pulmonary and renal systems are very much crucial and essential.

CARDIOVASCULAR SYSTEM :

The physiologic consequences of aging process has profound effects on cardiovascular system. The process of deterioration followed by regenerative and compensatory changes can result in the diminished physiologic reserve in elderly surgical patient and most commonly associated in thickness and rigidity resulting in decreased compliance throughout the arterial system. Age related atherosclerosis, hypertension, stiffer arterial walls promote pressure generated back from

the peripheral vasculature to the heart. The cardiac valves themselves also undergo specific age-related changes of degenerative calcification of valve and annular ring with valvular stenosisand subsequent insufficiency. Increased vascular resistance and hypertension and can result in cardiac hypertrophy, impaired cardiac diastolic dysfunction, valvular disorder, an impaired conduction system and sequel associated with coronary artery disease (CAD).

Cardiac complications represent the most common cause of post-operative morbidity and mortality in elderly patient population. Myocardial Infarction (MI) and congestive heart failure (CHF)are responsible for one fourth of all cardiac complications and death in elderly. Also pre-operative and intra-operative myocardial infarction has dramatically higher mortality in elderly surgical patients. As a result, preoperative assessment of cardiovascular system in the elderly surgical patient plays an important role.

Risk Assessment :

History:- Proper history taking is paramount important in preoperative assessment. A focused history should attempt to identify any serious cardiac conditions, including recent or past MI, symptoms consistent with heart failure, valvular disease, arrhythmias, claudication or poorly controlled hypertension. Any previous surgery, comorbidities includediabetes mellitus, renal dysfunction, chronic obstructive pulmonary disease (COPD), peripheral vascular disease. The history of smoking or alcohol use and detailed medication history should be obtained.

Physical Examination :- The general appearance of a patient can provide both evidence of over all level of fitness and subtle clues suggestive of underlying cardiovascular pathology. Presence of dyspnoea with minimal exertion, cyanosis, pallor may indicative of underlying CHF or undiagnosed coronary artery disease (CAD). An assessment of vital signs, palpation of carotid and extremity pulses, auscultation of heart and lung and careful examination of the neck for jugular venous distension and hepatojugular reflex are critical. The presence of peripheral oedema should be looked for.

Investigation:- All elderly surgical patient should have basic laboratory test including a complete hemogram, a basic metabolic profile, a chest x-ray with 12 lead electrocardiography (ECG). The patient with previous history of MI or established CAD a preoperative ECG does have important prognostic implications. The magnitude of Q wave, down sloping of ST segment greater than

0.5mm, left ventricular hypertrophy, left bundle branch block are all associated with increased perioperative mortality. These patients generally require additional testing like exercise and Radio nucleotide stress testing and evaluation of left ventricular function. The choice of initial stress test should be based on an evaluation of the patient resting ECG, ability to exercise. Absolute contraindication to stress test includes acute MI within the preceding two days, unstable angina, uncontrolled cardiac arrhythmias, symptomatic severe aortic stenosis, uncontrolled symptomatic heart failure, acute pulmonary embolus, acute pulmonary dissection or pericarditis. A relative contraindication to stress testing is physical and mental impairment from co-morbidities limiting physical activity.

An additional modality used in preoperative workup of elderly surgical patient is the echo cardiogram. Echo cardiography is useful in the assessment of murmurs, prosthetic valve function, delineation of cardiac size and function like ventricular ejection fraction or wall motion abnormalities.

The cardiac complications represent the most common cause of morbidity and mortality in the elderly surgical patient and as such, careful preoperative evaluation is necessary in any patient over the age 65years undergoing surgical procedures.

PULMONARY SYSTEM :-

As age of the adult advances the respiratory system undergoes both changes in the mechanics of respiration and the ability of lung to efficiently perform gas exchange. The volume of air remaining in the lung after maximal exhalation (Residual volume)is increases with the age because of less elasticity of lung in elderly and this may lead to clinically significant hyperinflation and may worsened in both asthma and COPD.

Risk Assessment :-

The postoperative pulmonary complications are more or less as common as cardiac complications particularly in elderly age group. The preoperative examination of respiratory functions should aimed at identifying risk factors.

History and Physical Examination :

To identify the patient related risk factors proper history taking and physical examinations is mandatory. A history of cough, shortness of breath, poor exercise tolerance, history of smoking and the diagnosis of COPD or asthma should be ascertained. Physical examination is focused on lung auscultation and an evaluation of respiratory effort.

Spirometry:

Spirometry is most commonly performed test used in the assessment of preoperative pulmonary risk due to its low cost and ease of use in elderly patients. It uses a flow sensor to measure the forced expiratory volume in one second (FEV) and forced vital capacity (FVC). Theratio of FEV1/FVC is used to aid in the diagnosis of both restrictive and obstructive pulmonary disorders.Unfortunately this test has limited predictive value in terms of preoperative risk. Although there is no indication for routine spirometry measurement. The spirometry may be of benefit in patients with poor exercise tolerance or dyspnoea on exertion that does not have clear cardiac versus pulmonary aetiology. The postoperative pulmonary complications in the elderly patient represent a significant cause of morbidity and mortality in postoperative period.

RENAL SYSTEM :-

The kidney under goes important changes in both structure and function as person ages. This includes reduced cortical mass, interstitial fibrosis and renal tubular atrophy. The average renal blood flow decreases about 10% per decade after the age of fifty. The rates of glomerular filtration rates (GFR) with increasing age are variable. As person ages, there is loss of muscle bulk and accompanying reduction in creatinine production that occurs concomitantly with reduction in GFR. As a result, the serum creatinine level remain constant despite decrease renal function. So, caution should be used in determining renal function based on interpretation of serum creatinine alone.

Risk Assessment :

The history and physical examination should focus on identifying comorbid conditions that often adversely affect renal function. This includes a history of controlled or uncontrolled hypertension, diabetes and CAD. A thorough review of medications that either alters renal function such as

diuretics, antibiotics is mandatory. In patient above 50 years serum electrolytes and estimating GFR are appropriate to determine preoperative renal function.

DEMENTIA, FRAILTY, NUTRTIONAL STATUS :

Dementia :

Dementia in the elderly has two key defining features – a decline in the level of functioning from base line and deficits that interfere with usual activities of daily living or work. It is important to identify dementia preoperatively in elderly surgical patients. Pre-existing dementia and cognitive impairment are strong predictors of postoperative delirium and worsening dementia. It increases the prolonged intensive care, hospitalisation, morbidity and cost of treatment.

Frailty:

Frailty is a relatively new term to describe, a patients physiology reserve and predict the ability to tolerate stressors. As defined by Topinkova, the syndrome of frailty involves multiple organ systems and manifest as an “increase in vulnerability, impaired ability to withstand intrinsic and environmental stressors and capacity to maintain physiological homeostasis”. The concept was first defined at John Hopkins University who used a five-domain assessment strategy with each person scoring 0 or 1 for each domain. The five areas include shrinkage, weakness, exhaustion, low physical activity and slowness. A score 0-1 indicates that patient is not frail, 2-3 describe intermediate or pre-frailty and 4 or above is considered frail. Frailty increases perioperative and postoperative complications. It increases the hospital stay and cost of therapy. Frailty has also been associated with worsening postoperative mobility, inability to perform previous levels of activities of daily livings.

Nutritional Status

The weight gain between the age of 30 to 60 is common. This weight gain is due to increase in total body fat, however weight typically stabilises and eventually starts to decline. This is characterised by loss in both total body fat and lean body mass. Elderly patients are at high risk for malnutrition during perioperative period due to prolong bed rest following surgery, inadequate nutrient intake, physical limitation of eating in the hospital setting (eg.Eating in supine position).

Poor nutritional status has been clearly associated with poor surgical outcomes. The majority of perioperative morbidity and mortality comes from infectious complications and is associated with increased risk of pneumonia, prolonged wound healing, surgical site infection, automatic leak, increased length of hospital stay.

The history and physical examination should focus on identification of pre-existing poor nutritional status. Intentional and unintentional weight loss over the previous six months should be determined. A detailed nutrient intake assessment will give some clue to unintentional weight loss. Height and weight should be recorded with emphasis on any trends in weight loss as this allows for accurate calculation of body mass index (BMI). A low BMI (<18.5kg/m2), greater than 15% weight loss over six months and albumin less than 3mg/dl suggest severe nutritional risk. Measuring serum albumin and referral for comprehensive nutritional assessment are appropriate in specific patient population.

Preoperative evaluation of a surgical patient is the responsibility of both the surgeon and anaesthesiologist. The anaesthesiologist is the key person to assess in that situation. But on the same time the surgeon is also equally responsible and cannot avoid by putting the only responsibility to the anaesthesiologist. It might need good understanding between both the specialities. Both the teams should have respect to each other and good surgical outcome can be expected.

During preoperative assessment everything about the operation-what is the disease, what will be the operation its merits and demerits, risk factors involved with the operation has to be explained to the patient and guardians. It is also necessary to explain about the conversion of procedures either of anaesthesia or surgery if needed. Both the surgeon and anaesthesiologist should have good consultation about the disease and procedure to be taken preoperatively. There must have a clear understanding among the surgeon, anaesthesiologist, patient and their guardian about the operation for smooth outcome.

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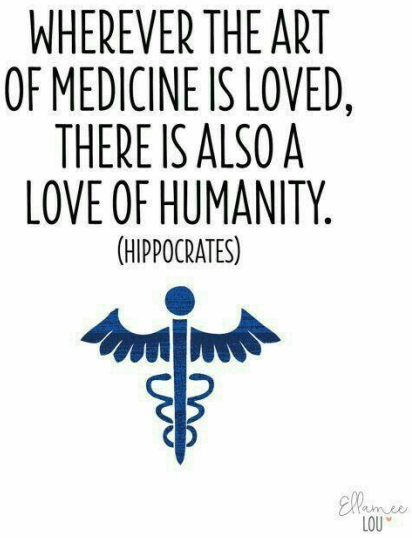

REPORT OF IMA CGP ASSAM STATE FACULTY

Total Membership strength as on date

Existing	=	511 Nos.
New member enrolled	=	3 Nos.
Grand Total	=	514 Nos.

Total Sub-Faculty – 4 Nos.

Tezpur – Tinsukia – Hojai- North Lakhimpur

North Lakhimpur is approved by the Governing Council meeting during the NATCON-21 held at 'PATNA' Bihar on 27th and 28th December'2021.

ACHIEVEMENT BY THE MEMBER OF THE IMA CGP ASSAM STATE FACULTY IN THE NATIONAL LEVEL.

It is my proud privilege to mentioned that IMA College of General Practitioners, Assam State Faculty under Assam State Branch IMA for the second time able to achieved recognition and appreciation in the national level IMA and CGP HQs in different categories by its members in the year 2021.

The year 2021 will be the memorable year in the history of IMA CGP ASF.

I offer my heartiest thanks and gratitude on behalf of the members of the IMA CGP ASF to the Hon'ble National Leaders of IMA and IMA CGP HQs.

Total 6(six) Nos. Life members of the State Faculty Awarded in different category by the National H.Qs during the award giving ceremony 'NATCON-2021' at Patna, Bihar, they are : -

Followings are the categories received, recognition and appreciation : -

Individual Level : -

By CGP ASF Members –

By IMA ASB Members –

Other categories –

By CGP ASF Members

1. Dr. Hemendra Kumar Borah, Director of Faculty- IMA CGP Dr. M.G. Bhide Memorial Award.

2. Dr. Satyajit Borah, President, IMA CGP State Faculty –

   a) Best State President (National President's Appreciation Golden Star Award)

   b) IMA National President's Appreciation Award for Cultural Activities.

   c) Dr. B.R. Ramasubramanian Oration Award.

   d) Young Academic Excellency Award on Teachers' Day

3. Dr. Sikha Sarma, Hony. State Secretary, IMA ASB cum Secretary State Faculty (Ex-officio)

   a) Best State Secretary (National President's Appreciation Golden Star Award)

   b) IMA Prof. RajamAuthilingam Award in Safe Motherhood Activities.

4. Dr. Upendra Nath Dutta of North Lakhimpur Branch – Best Local Branch President (National President's Appreciation Award)

5. Dr. PrernaKeshan of Tinsukia Branch – IMA Dr. Kanak Goel Award in Safe Motherhood Activity.

6. Dr. Hiranmoy Adhikari – Past CGP Dean. - Bangaigaon Branch – IMA National President's Appreciation Award for Life Long Service to IMA.

7. As per the decision of the 142nd Ordinary Meeting of the Central Council of IMA held on 28th December, 2021 at Patna, Bihar, the National President, IMA, Dr. Sahajanand PD. Sing is pleased to constitute/reconstitute the following IMA Standing Committee of North East till further orders.

   IMA Standing Committee of North East

   The member of the committee are selected as follows :

   a) Dr. Hiranmay Adhikari, Co-Chairman, Assam

   b) Dr. Satyajit Borah, Co-Convenor, Assam

8. IMA Communicable Diseases

   a) Dr. HamangaBaishya, Convenor, Assam

IMA ASSAM STATE BRANCH LIFE MEMBER -AWARD IN FOLLOWING CATEGORY

1. Dr. SurajitGiri – Sibsagar Branch Best Local Branch Secretary (National President Appreciation Award)

2. Dr. Kamal Narayan Kalita – Tezpur Branch IMA Dr. Ramachandra Moorthy Award in Psychiatry.

3. Dr. Chandan Chowdhury – Bongaigaon Branch – IMA Dr. Ketan Desai Yuba Leader Award
4. IMA Dr. D.S. Munagekar Award in Research – Dr. Gayatri Gogoi of Dibrugarh Branch

OTHER CATEGORY

1. IMA Dr. C.L. Jhaveri Safe Motherhood Activity Award for – Assam State Branch.
2. IMA Special Award for Organising Central Working Committee Meeting – Assam State Branch.
3. IMA Bulletin Award – IMA ASB Calling

ACTIVITIES

1. Privileged to attend as appointed speaker in the Awareness meeting of "World AIDS Day" on 01-12-2021 organised by IMA Tezpur Branch, District Health Society, Sonitpur and District Legal Cell, Sonitpur.

IMA CGP HQ's important Zoom Meeting

Attended by :

Dr. Satyaji Borah- President IMA CGP ASF

Dr. Henendra Kr Borah – Director of Faculty, IMA CGP, ASF

1. Attend National CGP hybrid Zoom meeting on 09-01-2022 and took part in discussion of the plan of action for the year 2022.
2. on 02/02/2022 : First issue of Family Doctor journal January released through zoom meeting by Dean Dr. AvinashBhandve.
3. on 13/02/2002: Inaugurated the family Medicine course 2022 of IMA CGP by DEAN Dr. AvinashBhandve.

Courses are :

a. Fellowship in family Medicine.

b. Primary care echocardiography

4. On 20/02/2022 : CME on "Management of Burns and recent advance in treatment

With deep sense of appreciation all these have been possible due to collective efforts of the esteemed members of IMA CGP ASF and IMA ASB.

I am grateful to Dr. Satyajit Borah, State President, Dr. (Mrs) Sikha Sarma, Hony. State Secretary, both Vice President Dr. A.M. Boruah, Dr. Lakshewar Bhuyan and Finance Secretary Dr. RajumoniSarma for their time to time active supports.

My special thanks goes to Hony. Secretary, IMA CGP ASF Dr. Jagadish Basumatary for meticulous and systematic editorial works for the CGPNEWS Journal amidst his extensive Covid Duty as H.O.D. of Critical care, Anaesthesiology Department of Tezpur Medical College Hospital

Lastly offer my congratulation and greetings to all awardees from the members of IMA CGP ASF for their recognisable and appreciable works during the Covid-19 pandemic period.

Long Live IMA

Long Live IMA ASB

Long Live IMA CGP

(Dr. H.K. Borah)
Director of Studies,
IMA CGP ASF

Important Informations

(1) Total state/ territorial FACULTIES - **17 States**

(2) Total L.M of CGP = over all IMA CGP Life members **22530**

(3) Names of the course and presently running course.

At present 2 courses

Fellowship in Family Medicine = Total 8

modules Fees **Rs:30,000/-**

Primary care echocardiography = Total 10 modules

Fees Rs:40,000/-

(4) **IMA CGP Life Member fees Rs: 250/-**

(Updated Application Attached)

IMA CGP HQ is planning to conduct following fellowship courses,

1. Fellowship in Family Medicine presently Running
2. Fellowship in Echocardiography presently Running
3. Fellowship in Basic Practice Management
4. Fellowship in sexual Medicine

Contact Nos : 86672 39868 / 97890 14450

I.M.A. College of General Practitio
Head Quarters

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Off:Mudichur Road,Tambaram(West),Chennai- 600 045
Mob: 8667239868 /9789014450 E-mail:cgpima@gmail.com

COURSE APPLICATION FORM

Course Opted by the Candidate: .....

1. Name (in block Letters) : Dr.....
2. Date of Birth : Age: Sex: M/F
3. Father's / Husband's Name: .....
4. Nationality : .....
5. Permanent Mailing Address: .....
6. Telephone : Landline ..... Mobile.....

   Email/Whats App No. :...../.....
7. Medical Council Registration No. :
8. Year & State of Registration :
9. IMA State Branch :
10. IMA Life Membership No :
11. IMA CGP Life Membership Number:
12. Qualification :

(Provide full details in Chronological Order. Give the exact name of the Institution, title of degrees/diplomas. **Important**: Xerox copy of Certificates must be enclosed)

Year From	year to	Institution (Name,State,City&Country)	Degree Obtained	Manjor Fields of Study	Language used

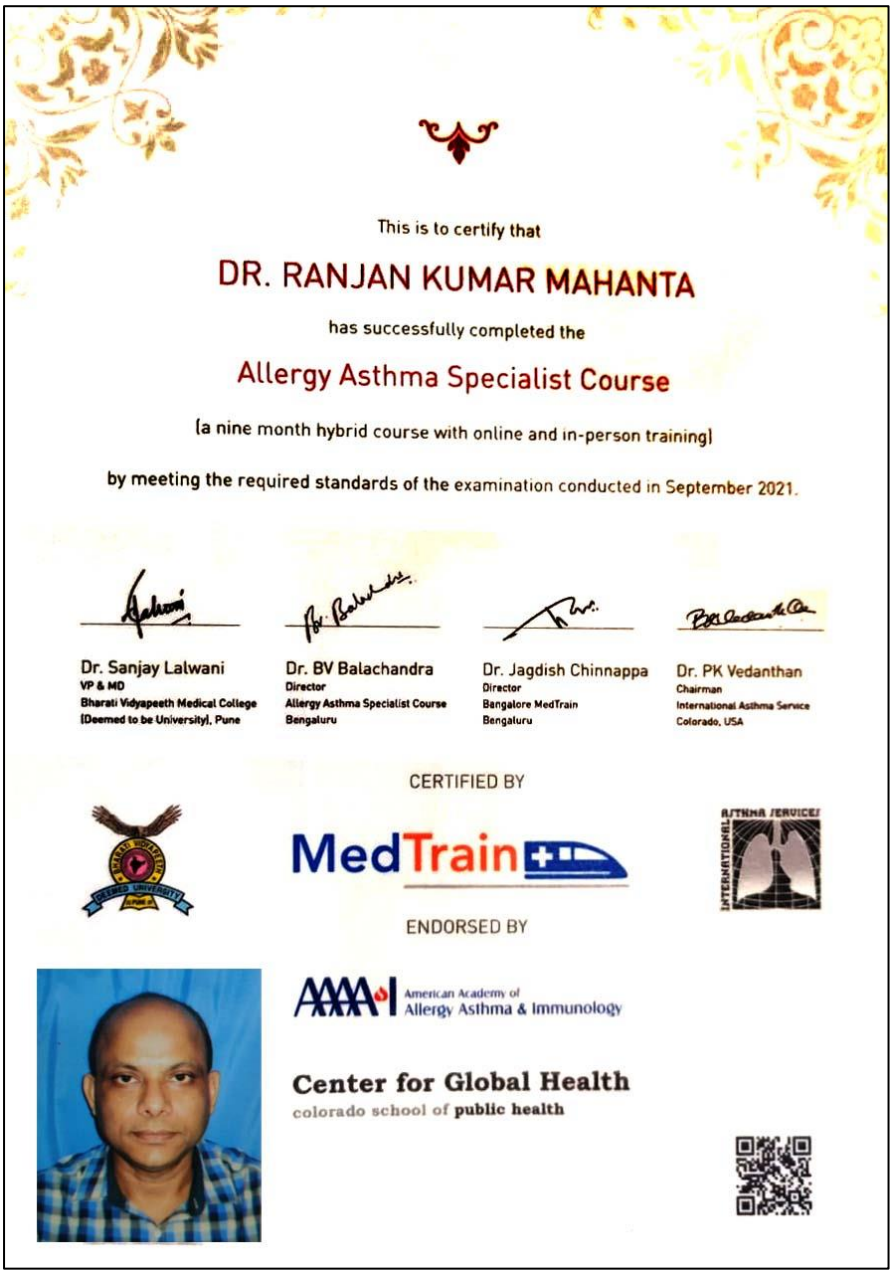
13. EMPLOYMENT RECORD(in chronological order)
Beginning with your present post, provide precisedetails of your responsibilities and activities and describe what you are doing(supervising, planning,training,etc.).

Date	Job Title	Specific Duties	Name & Address of the Organization

14. Mode of Payment: Refer fees details Annexed
Rs..... Cheque/DD No.....Dated.....Bank.....

(In Favour of "IMA CGP HQRS" Payable at Chennai)

Date: **Signature**



This is to certify that

DR. RANJAN KUMAR MAHANTA

has successfully completed the

Allergy Asthma Specialist Course

(a nine month hybrid course with online and in-person training)

by meeting the required standards of the examination conducted in September 2021.

Dr. Sanjay Lalwani
VP & MD
Bharati Vidyapeeth Medical College
(Deemed to be University), Pune

Dr. BV Balachandra
Director
Allergy Asthma Specialist Course
Bengaluru

Dr. Jagdish Chinnappa
Director
Bangalore MedTrain
Bengaluru

Dr. PK Vedanthan
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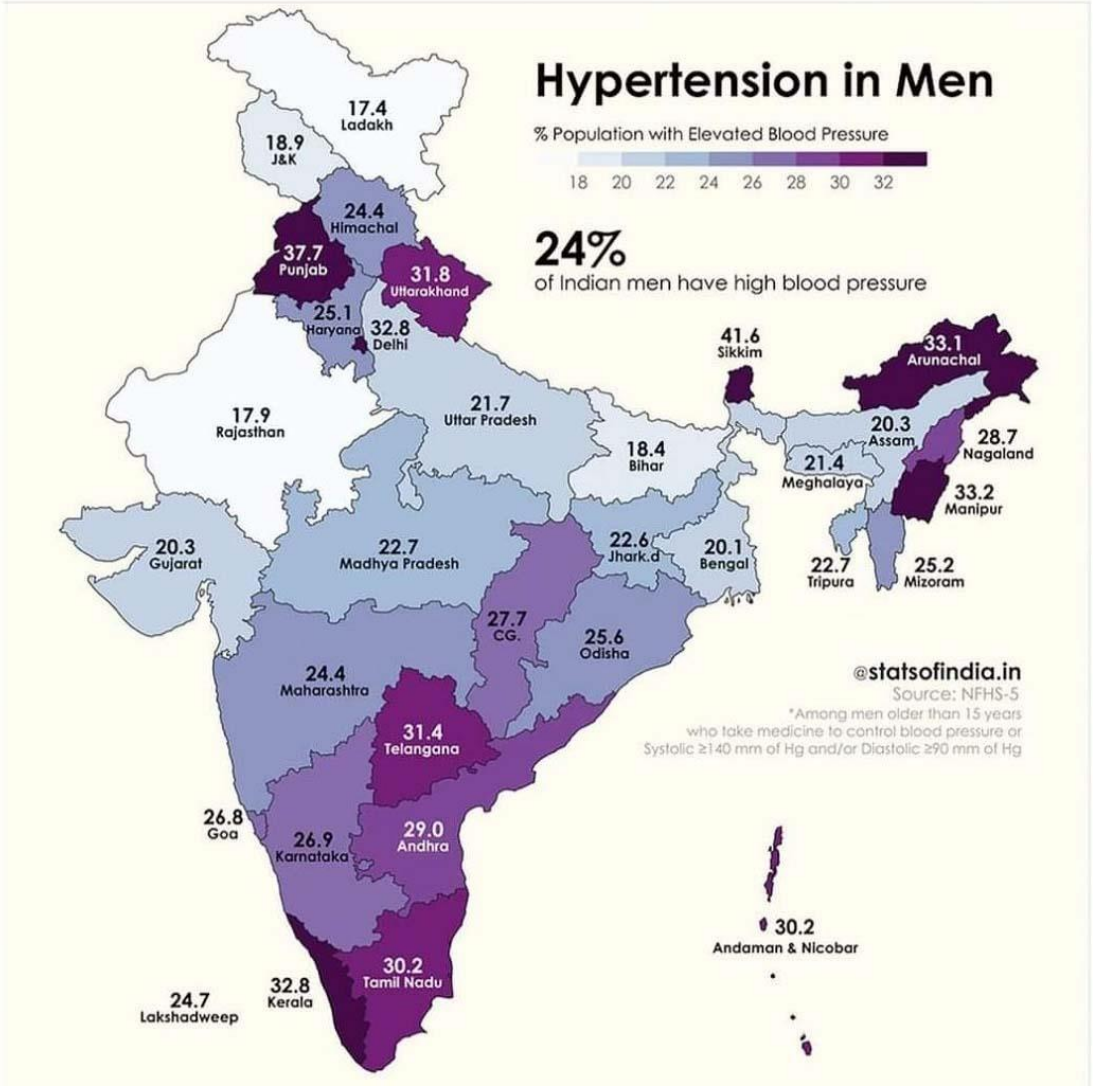
American Academy of Allergy Asthma & Immunology

Center for Global Health
colorado school of public health

24% OF INDIAN MEN HAVE HYPERTENSION

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* Clinical Haematology
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DR. KAMAL NARAYAN KALITA

DR. UPENDRA N. DUTTA.
PRESIDENT, NORTH LAKHIMPUR BR.IMA.

DR. SURJIT GIRI,
HONY. SECRETARY
IMA SIBSAGAR BRANCH

DR. HEMANGO BAISHYA
IMA PAST STATE SECRETARY

ACHIVEMENT CERTIFICATE OF IMA CGP ASF / ASB MEMBERS

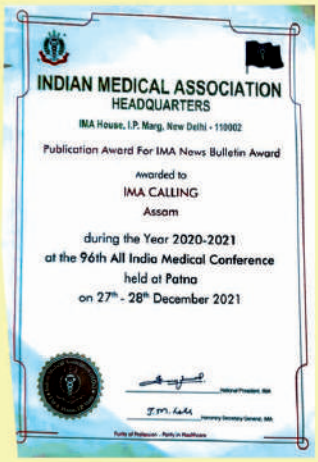


Photo Galary

Glimpse of 226th CWC at GUWAHATI on 9th and 10th November 2021

Photographs of IMA CGP HQ Zoom Meeting (Inugration of Family Doctors Monthly Journal Jan/Feb/22, Family Medicine Course, Annual Meetiong of CGP HQ.)

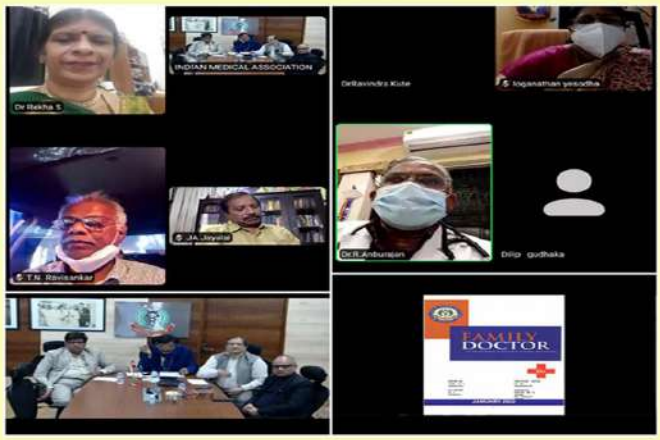
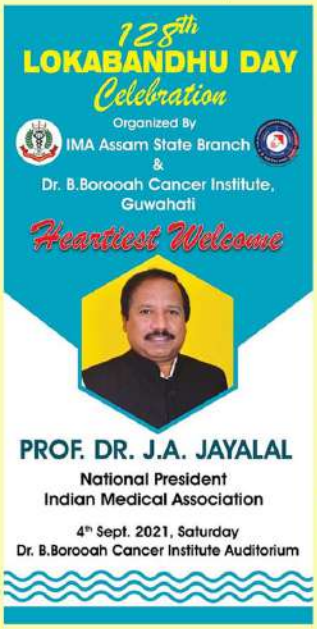


Photo Galary

Photographs of Celebrate 128th Birth anniversary of LOKABANDHU DAY Centrally in the Auditorium of BBCI, Guwahati on 4th September 2021.
Professor Dr. J A JAYALAL grace the celebration as chief Guest,
Dr.Amal Kataky Director of BBCI and Cine activities Mr. Pranjal Saikia as Guest of Honour .



Photograph of Glimpse of NATCON 2021 PATNA and 226TH CWC GUWAHATI