

# What's Up? @St John's Hospital

Issue 30, August 16<sup>th</sup>, 2019



Poster for Breast Feeding Awareness week.

PC: Dr. Bharathi Balachander



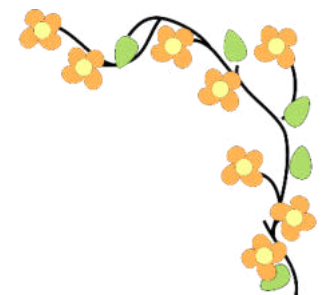
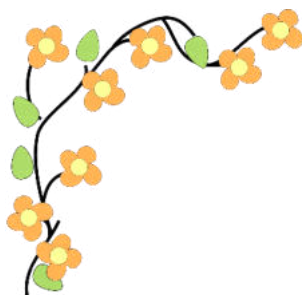
## HAPPY INDEPENDENCE DAY

### EDITORIAL TEAM:

Anjalin Sebastian, Anjana Ann Mary, Archana S, Avinash. H. U, Bhavyank Contractor, Blessy Susan Biji, Deepak Kamath, Jenniefer Gabriela, Jyothi Idiculla, Manu. M. K. Varma, Merlin Varghese Susan, Neha Zacharias, Nivedita Kamath, Rakesh Ramesh, Ruchi Kanhere, Sanjiv Lewin, Sanjukta Rao, Santu Ghosh, Saudamini Nesargi, Sheela Immaculate, Srilakshmi Adhyapak, Uma Maheshwari, Rev. Fr. Vimal Francis, Winston Padua



St John's National Academy of Health Sciences  
St John's Medical College Hospital, Bengaluru



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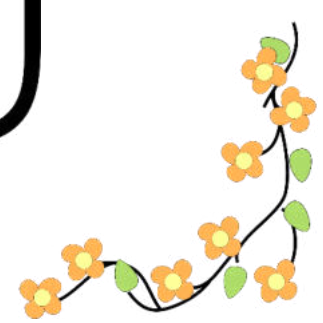
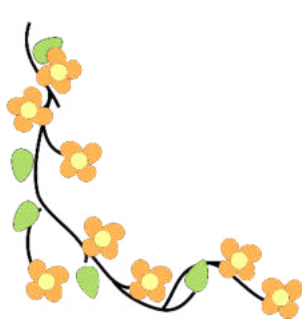
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## MESSAGE FROM THE EDITORIAL TEAM

**Dear All!!!**

We are pleased to share the Thirtieth issue of “What’s Up? @ St John’s Hospital” magazine today.

Friends, as you all are aware, the section ‘St. John’s Fountainhead’ will publish abstracts of 2 published research articles from the year 2018. The articles are selected by a criteria laid down by the editorial team. We request you all to please mail your publications to us.

The present issue is dedicated to World Breast Feeding Week which was observed from 1<sup>st</sup> to 7<sup>th</sup> August 2019. We thank Dr. Bharathi Balachander (Assistant Professor, Neonatology) for providing us a detailed report of all the activities carried out on this occasion.

We are sure that you will enjoy reading about our ‘***hospital chefs!***’ in the section ‘Team of the month’. And, this issue introduces you to ‘Department of Transfusion Medicine and Immunohaematology’ in St. John’s Medical College Hospital in Know your hospital section.

Do not miss loads of updates in this issue. In line with our motto, ‘More pictures & less text’

Please feel free to communicate with us to publish your achievements and events. Your feedback motivates us to work harder. Happy Reading!!

**Editorial Team**



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# UPDATES THIS WEEK

## Report - World Breastfeeding Week 2019 (1<sup>st</sup> to 7<sup>th</sup> August 2019)

*Empower Parents, Enable Breast Feeding*



### FOREWORD

Breastfeeding plays a very important role in the road to health of not just an individual but to a family, community, society, country and the world at large. To ensure sustainability to this very important road to health, empowerment is the key. This is also illustrated in the logo given by WABA showing both parents with the baby & society.

We, the **Departments of Neonatology, Pediatrics, Obstetrics and Gynecology, College of nursing, Community health, lactation department and research institute** of St. John's Medical College hospital organized one week long celebration in order to promote, educate and re-iterate the importance of breastfeeding.

Over the period of 1 week, all efforts were taken to educate various health personnel including doctors, nurses, students on the importance of human milk and breastfeeding through various innovative, fun educational activities. All efforts were made to keep up with the theme and ensure paternal involvement in breastfeeding

We thank the administration of St. John's Medical College -**Fr. Paul Pazhathazam** (Director), **Fr Pradeep Kumar Samad** (Associate Director Hospital) , **Fr . Jesudoss** (Associate Director Finance) , **Dr. Sanjiv Lewin** (CMS), **Sr Fatima** (CNS) for supporting the celebrations.

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# World Breastfeeding Week 2019

## PEOPLE & THE DEPARTMENTS INVOLVED

The father- mother-baby triad has brought together the following departments to join hands to put up the celebration of the World Breastfeeding Week 2019.



## DAY1 – 1/8/19 - INAUGURATION IN THE PEDIATRIC OPD

The celebration started with an inauguration in the pediatric OPD by the Associate Director of the Hospital (Rev. Fr. Pradeep K Samad) along with the Chief Nursing Superintendent (Sr. Fatima). The pediatric OPD had posters that were prepared by the department of lactation. The inauguration was attended by all doctors and nurses. Families attending the pediatric OPD also attended the inauguration. Dr Fulton D Souza(HOD , Pediatrics) welcomed all and addressed the gathering. Health education was given to all mothers attending the OPD. This was followed by poster and slogan competition which were evaluated by 2 judges ( Dr Shuba , Mrs Mary Ann)

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# World Breastfeeding Week 2019



DAY1 – 1/8/19 -  
INAUGURATION  
IN THE  
PEDIATRIC OPD

## DAY1 – 1/8/19 – POSTER AND SLOGAN COMPETITION

Poster & Slogan competition was held in the institute. There was an enthusiastic participation from all wards in the hospital. The posters and slogans had to encompass the theme.



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# World Breastfeeding Week 2019

## DAY1 – 1/8/19 – POSTER AND SLOGAN COMPETITION

The following people had won the ***slogan competition***

1<sup>st</sup> Prize: Dr Pooja

2<sup>nd</sup> Prize: Dr Philomena

3<sup>rd</sup> Prize: Blessy S Soji ( Tutor)

The following people had won the ***Poster Competition***

1<sup>st</sup> Prize : Dr Kadambari

2<sup>nd</sup> Prize :Daniella Princy

3<sup>rd</sup> Prize : Ms Manjula



## DAY1 – 1/8/19 - HEALTH EDUCATION IN MUGLUR (RURAL OUTREACH UNIT)

A health education programme with dance, song, skit was conducted by the department of Community medicine along with staff nurses, students, neonatal fellows in the rural outreach center of Muglur .This was enjoyed by the residents and well appreciated. Dr Deepthi (Community medicine) ensured the smooth functioning of the activities. Prizes were given for best poster from the competition conducted for school students



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# World Breastfeeding Week 2019

## DAY2 – 2/8/19 HEALTH EDUCATION IN OB WARD

Health education was given to antenatal and postnatal mothers in OB ward by the nursing students and staff nurses. This was inaugurated by a speech by Fr. Pradeep Kumar Samad (Associate Director Hospital) . The education was done in the form of role play, drama , dance and songs. This was widely appreciated and enjoyed by the mothers and their attenders(esp. the grandmoms). This was followed by a health education session by Dr Nalina. A (Q & A) session was held where all the doubts were addressed



## DAY3 – 3/8/19 COUPLE QUIZ – COUPLE GOAL!

To commemorate the theme, a couple quiz was organized. This ensured paternal participation. We observed that the fathers were most enthusiastic about the quiz and knew answers to most questions. We have decided to conduct this fun-filled activity every month to promote paternal involvement. The quiz was conducted by Dr Nirupama & Mrs. Benedictta.

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# World Breastfeeding Week 2019



**DAY3 – 3/8/19 COUPLE QUIZ – COUPLE GOAL!**

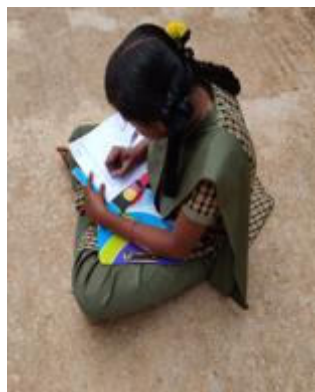
## **DAY3 – 3/8/19 - AWARENESS RALLY & ESSAY COMPETITION IN MUGLUR**

The students of St. John's Medical College organized a rally to promote awareness about breastfeeding. Posters and drawings were printed in Kannada along with students saying slogans. The medical students were joined by school students (Tiny tots) who brought a lot of laughter, joy to the event.


This was followed by an essay competition for school students. An early start leads to a great sustenance. School health programs promoting education regarding breastfeeding is a great way to promote awareness to the family

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**DAY3 – 3/8/19 AWARENESS RALLY & ESSAY COMPETITION IN MUGLUR**





# World Breastfeeding Week 2019

## DAY 5 – 5/8/19 DEBATE – HEALTH PERSONNEL VERSUS FAMILY – WHO SUPPORTS BREASTFEEDING BETTER?

A debate was conducted by the Department of Pediatrics & Neonatology. Dr.Sr. Teslin & Dr Deepa spoke for Health personnel. Dr Gitanjali & Dr Nalina spoke for Family. All arguments put forth included latest evidence based discussions. The initial votes before the talks were for Family supporting breastfeeding better and post the talks the balance tilted towards health personnel. It was concluded that, both work hand in hand to bring about, an early initiation & sustenance. Dr Aruna & Dr Shashidhar were the moderators.



## DAY 5 – 5/8/19 JUST A MINUTE

This was a fun filled activity organized by Dr Naina Bhat (Senior Resident, Pediatrics). Doctor- Nurse teams were formed. Specific topics were given for teams to speak on. The speakers were judged on non-hesitation, non-repetitiveness, comical sense and fluency. A number of recent advances including updated BFHI and Neo BFHI were learnt in this way.



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# World Breastfeeding Week 2019

## DAY 5 – 5/8/19 HEALTH EDUCATION & QUIZ IN AUSTIN TOWN – URBAN OUTREACH CENTRE

A health education & quiz was conducted in the Austin Town Maternity home for the antenatal & postnatal mothers. This was organized by the department of community medicine.



## DAY 6 – 6/8/19 LACTATION WORKSHOP

The workshop on lactation was conducted in the Skills lab. The participants included doctors and nurses. The faculty were from the departments of community medicine, SJRI, neonatology and OBG. The focus was on overall counselling, empowerment. Hands on sessions were conducted on early skin to skin contact, milk expression, position & attachment. The demo was done on mannequins and also a ward rounds was conducted. All participants passed with flying colors.





# World Breastfeeding Week 2019

## LACTATION WORKSHOP



## MISCELLANEOUS - LACTATION WORKSHOP IN CHELUVAMBA & CHAMRAJNAGAR

A health education & quiz was conducted in the Austin Town Maternity home for the antenatal & postnatal mothers. This was organized by the department of community medicine.



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# World Breastfeeding Week 2019

## DAY 7 – 7/8/19 QUIZ FOR DOCTORS & NURSES PRESENTATION OF REPORT

The last day of WBW celebration was the quiz for doctor- nurse team. Doctors and nurses from various specialties across the hospital attended the quiz(Neonatal, OBG, Pediatric surgery, pediatrics, medicine, community medicine, hemat-onc, nephrology). The Quiz master was Dr Prashantha YN (Dept. of Neonatology). He was assisted by Dr Lakshmi , Ms Saritha, Dr. Saudamini, Ms. Sofia Stevens. The winners of the quiz were Dr Sahiti, Dr Verna & Ms. Monica. This was followed by presentation of report and a pledge to support breastfeeding now & henceforth by all health personnel across the hospital..





# College of Nursing Initiative in Elimination & Prevention of Dengue

**31<sup>st</sup> July 2019**

After the alarming dengue outbreak, the College of Nursing students were involved in a spot survey and eliminate dengue larvae in Koramangala area in collaboration with BBMP (Bruhat Bengaluru Mahanagara Palike). The same was again carried out in our campus including residential quarters. 170 nursing students took part in the eradication drive.





# ALUMNI REUNION

Golden Jubilee Batches – '68, '69, '70

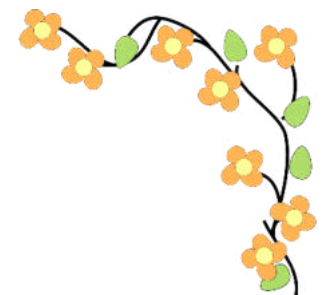
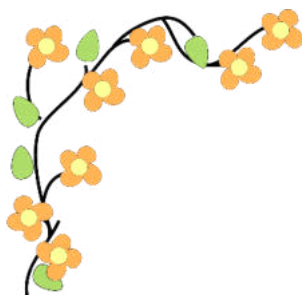
Silver Jubilee Batches – '92, '93, '94

2<sup>nd</sup> August 2019

St. John's National Academy of Health Sciences, witnessed the reunion of the Golden Jubilee and Silver Jubilee Batches on 2<sup>nd</sup> August 2019. The breakfast was organised in the hostel mess followed by the campus walk and holy mass in hospital Chapel. 37<sup>th</sup> Jayashree Thomas Memorial Oration was organised in Pope Paul Auditorium. Dr. Dileep N Lobo (Deputy Head of Division and Professor of Gastrointestinal Surgery, University of Nottingham) delivered the oration titled "A Surgical Odyssey".





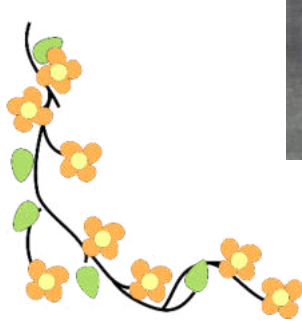


# ALUMNI REUNION

## Golden Jubilee Batches – '68, '69, '70

## Silver Jubilee Batches – '92, '93, '94

**2<sup>nd</sup> August 2019**





# Thanksgiving Time

Several departments organized thanksgiving parties for all the nursing and administrative support staff for their invaluable support and hardwork during the NABH and MCI inspections.



3<sup>rd</sup> August: To the nursing and paramedical staff of Oncology wards by Dept. of Radiation Oncology



3<sup>rd</sup> August: Academic and Admissions section by Deans Office



5<sup>th</sup> August: To the Nursing and Paramedical staff of Gynaecologic Oncology Ward by Dept. of Gynaecologic Oncology



# Thanks Giving Time



6<sup>th</sup> August: To the nursing and paramedical staff of Oncology ward by Dept. of Medical Oncology



12<sup>th</sup> August: To the Nursing and Paramedical staff of Pulmonology Ward by Dept. of Pulmonary Medicine



# CFL (Child For Life) Dynamite Run

3<sup>rd</sup> August 2019

*A Fund for Medical Treatment of Underprivileged Children*



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# St. John's College of Nursing – Model of Integral Education in Nursing

8<sup>th</sup> August 2019

**ST. JOHN'S NATIONAL ACADEMY OF HEALTH SCIENCES  
BANGALORE 560 034**



No. DIR/C-14/18 /2019

08 August 2019

## **CIRCULAR**

**St. John's College of Nursing Cited in Parliament as Model  
of Integral Education in Nursing**

The Ministry of Health and Family Welfare, New Delhi, in a written response to a question in the Parliament, highlighted the integration of Nursing Education and Practice piloted in St. John's College of Nursing, Bangalore, as a model to emulate as it has brought about "improved patient care, improved standards of nursing care and increased patient satisfaction".

Hearty Congratulations to the Faculty of the Nursing College and the Nursing Services Staff of the Hospital for their commitment and efforts to make St. John's initiative in integrating nursing education and practice a success.

Rev. Dr. Paul Parathazham  
Director

To: All Executives in the Academy  
Principal, College of Nursing  
All Notice Boards,

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# Inauguration of New OB Gyn Ward, Birth Suites and New Operation Theatres

**11<sup>th</sup> August 2019**

His Eminence Oswald Cardinal Gracias (The president of the Catholic Bishops' Conference of India(CBCI)), inaugurated and blessed the renovated Obstetric and Gynaecology Ward, New Operation Theatre and Birthing Suites on 11<sup>th</sup> August 2019, in the presence of the Members of the General Body of the CBCI Society for Medical Education.



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# FRIDAY CLINICAL MEETING

## Clinical Pathological Case Discussion

**19<sup>th</sup> July 2019**

### **An Adult with 4 years of lower limb pains, past fractures, venous ulcers and features suggestive of progressive proximal muscle weakness**

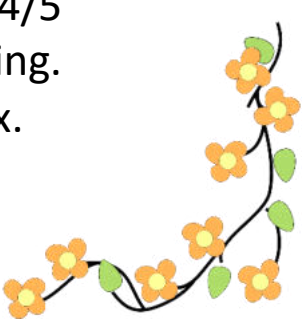
A 33 year old gentleman, waiter by profession presented to the outpatient clinic with complaints of pain in both the lower limbs for the last 4 years. The pain was insidious in onset, initially started over both feet and gradually progressed to involve both lower limbs including the hips. The pain was initially aggravated on walking and relieved on taking rest. He now has rest pain. He also complaints of weakness of both lower limbs for the last 2 years. He was unable to get up from a squatting position and stand for a long period of time. This was interfering with his Activity of Daily living (ADL).

He did not give any history of recurrent abdominal pain, abnormal posturing, haematuria or sexual dysfunction. He has no comorbidities and he is not a smoker.

4 years ago (at the onset of pain), he was diagnosed to have metatarsal fractures of both feet and treated with a cast for 6 weeks and vitamin supplements. 18 months ago, he was evaluated and diagnosed to have fractures in both hips and he underwent surgery on the right hip and received intramuscular injections in the postoperative period (1 injection/week for 7 weeks).

At the time of presentation, he was unable to ambulate independently and needed crutches to walk. The general physical examination of the patient was essentially normal and examination of the lower limbs revealed shortening of the right lower limb and a scar over the right hip. The spine and hips, knees and ankles were clinically normal.

The central nervous system examination of the patient revealed a grade 3/5 power of the flexors and extensors of both hips and knees and grade 4/5 power of the flexors and extensors of the ankle. There was no sensory blunting. There was generalized hyperreflexia with a flexor response to the plantar reflex.





## An Adult with 4 years of lower limb pains, past fractures, venous ulcers and features suggestive of progressive proximal muscle weakness – CONTD...

The patient was evaluated. The X-rays of the spine, both the feet and ankle revealed diffuse osteopenia. The X-ray of the right hip revealed a healed subtrochanteric fracture with a DHS (Dynamic Hip Screw) in situ.

Blood investigations revealed a low calcium and phosphate level and increases serum Alkaline phosphatase levels. The Spot Urine Phosphate (converted to 24 hour urine Phosphate) was also high.

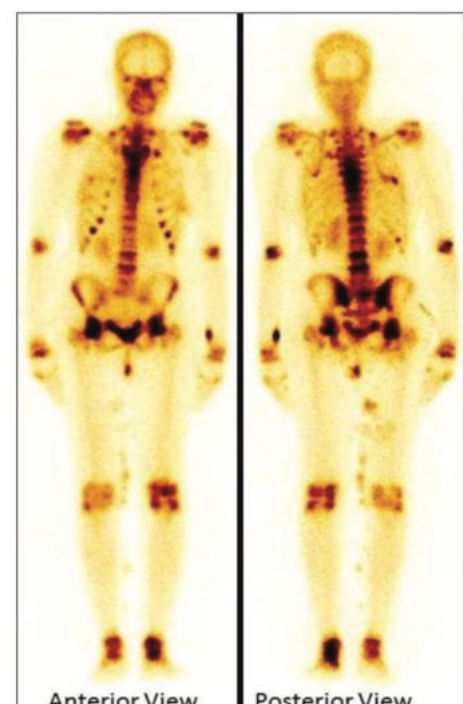
The Parathyroid hormone levels and Vit D and 1,25 Dehydrocholecalciferol levels were also normal.

Hb	13.5 g/dl	Calcium	8.3
TC	6430	Phosphate	2.0
DC	N61 L28 E4 M4	Albumin	3.2
PC	3.2 L		
ESR	14	PTH	42.86 pg/ml
RBS	78	Vitamin D	> 70 ng/ml
Creat	0.6	1,25 (OH) <sup>2</sup> D	24 pg/ml (20 to 60)
Electrolytes	136/4.4/102	Spot urine calcium	0.021
TP/Alb/TB/CB	6.8/3.2/0.68/ 0.28	Spot urine phosphate	0.094
AST/ALT /ALP/GGT	24/33/185/45	Spot urine creat	0.182

Technitium 99m bone scan revealed increased uptake around the ankles, left knee, both wrists and elbow, shoulder and pelvis.

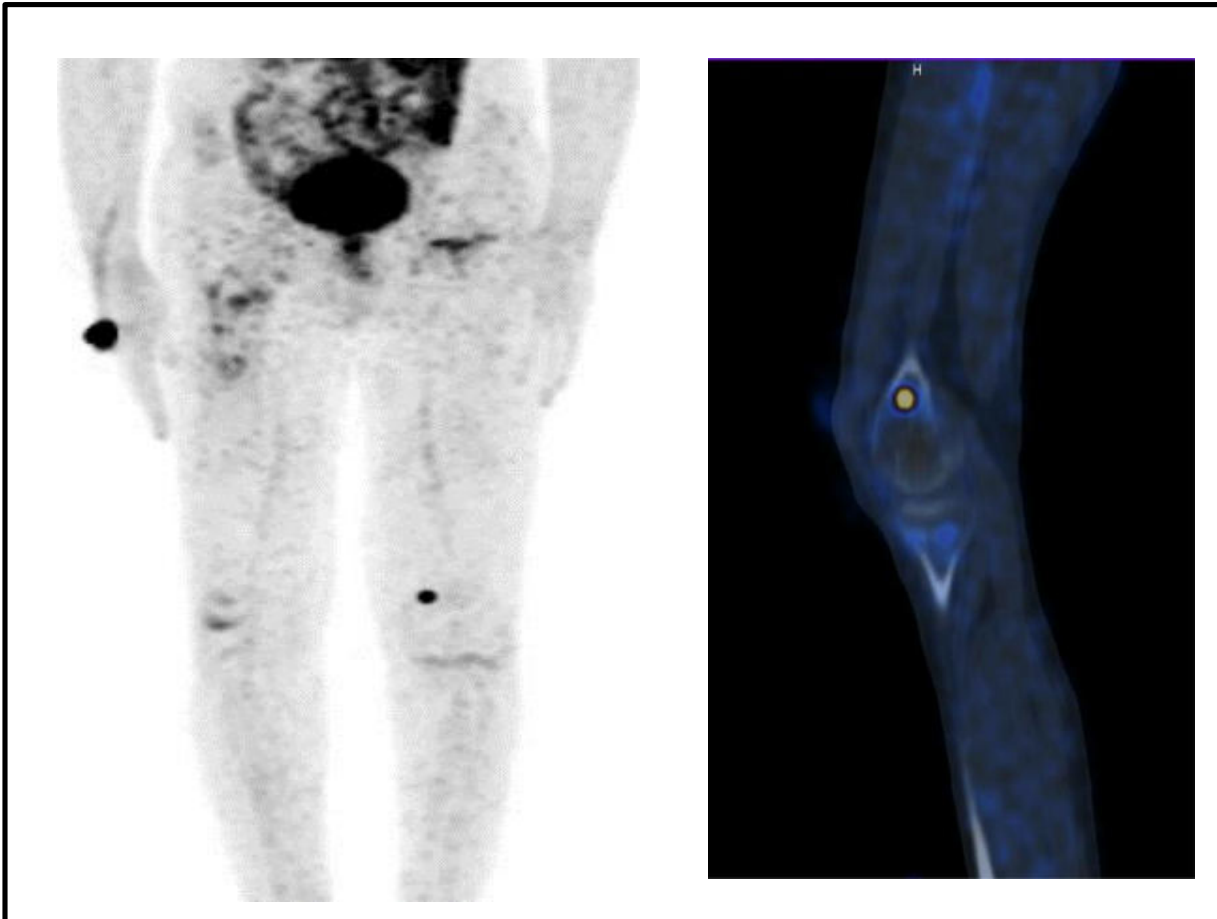
A provisional diagnosis of ***Tumour Induced Osteomalacia*** was made in view of the above results. In order to confirm the same and to look for any occult tumour, a PETCT was done.

The PETCT showed a 1.1 x 0.9 mm metabolically active lytic lesion with sclerotic rim in the medial supracondylar region of left femur

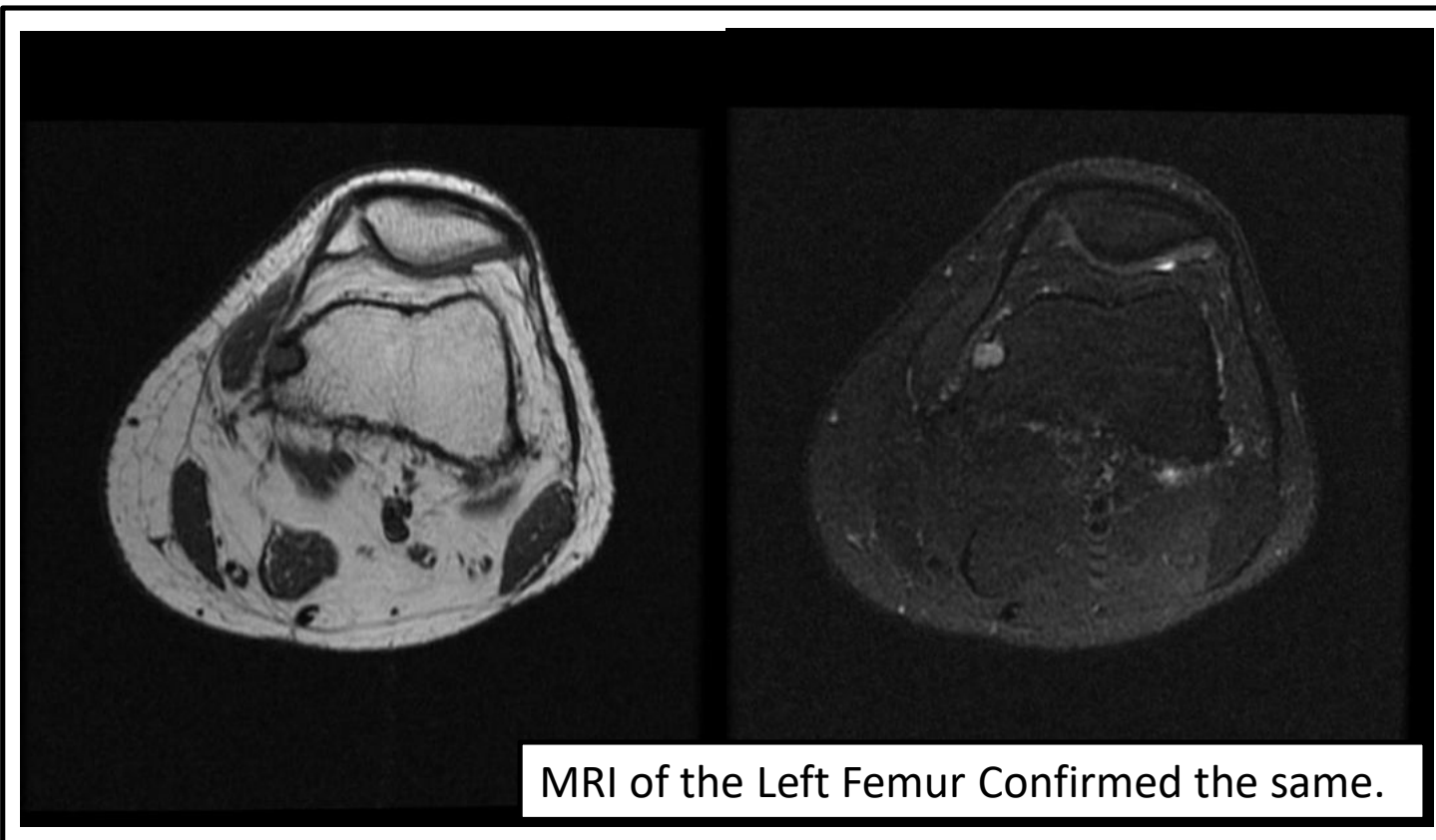




**An Adult with 4 years of lower limb pains, past fractures, venous ulcers and features suggestive of progressive proximal muscle weakness – CONTD...**



The PETCT showed a metabolically active lytic lesion in the medial supracondylar region of left femur





MRI of the Left Femur Confirmed the same.

The patient underwent an excision biopsy of the lesion.

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## **An Adult with 4 years of lower limb pains, past fractures, venous ulcers and features suggestive of progressive proximal muscle weakness – CONTD...**

### **TUMOR-INDUCED OSTEOMALACIA (TIO)**

Tumor-induced osteomalacia (TIO) also known oncogenic osteomalacia, is a rare paraneoplastic syndrome of abnormal phosphate and vitamin D metabolism caused by typically small endocrine tumors that secrete the phosphaturic hormone, fibroblast growth factor 23 (FGF23). FGF23 is secreted by mesenchymal tumors that are usually benign, but are typically very small and difficult to locate. FGF23 acts primarily at the renal tubule and impairs phosphate reabsorption and  $1\alpha$ -hydroxylation of 25-hydroxyvitamin D, leading to hypophosphatemia and low levels of 1,25-dihydroxy vitamin D.

TIO is counted among the ranks of endocrine neoplasms that have a striking presentation and, when resected, a dramatic and satisfying resolution. Due to the lack of knowledge about the existence of the disease, the length of time from onset of symptoms until diagnosis is often long. As result, patients frequently present with multiple fractures, height loss, and generalized debilitated status, reminiscent of how patients in the past would present with advanced primary hyperparathyroidism.

Biochemical hallmarks of the disorder are hypophosphatemia due to renal phosphate wasting, inappropriately normal or low 1,25-dihydroxy vitamin D, and elevated or inappropriately normal plasma FGF23.

The use of Bone Scan usually detects the affected bones due to TIO rather than the primary tumor.

A step-wise approach utilizing functional imaging (F-18 fluorodeoxyglucose positron emission tomography and octreotide scintigraphy) followed by anatomical imaging (computed tomography and/or magnetic resonance imaging), and, if needed, selective venous sampling with measurement of FGF23 is usually successful in locating the tumors. For tumors that cannot be located, medical treatment with phosphate supplements and active vitamin D (calcitriol or alphacalcidol) is usually successful; however, the medical regimen can be cumbersome and associated with complications.

AUTHORED BY: Dr. Belliappa.C. P, Assistant Professor,  
Department of Orthopaedics

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# Rhyme Chime...

## MIRROR

- Dr Jyothí Idículla

Mirror, mirror in my hand  
From a faraway exotic land

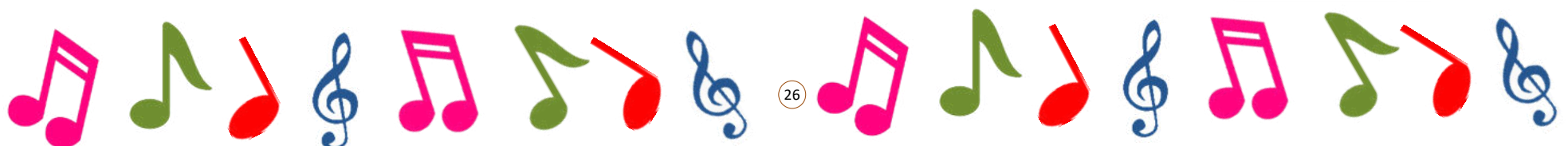
Looking at the polished surface  
I can see through my countenance

Scenes from my chequered past  
Flash through like a serial blast

Revealing the true colours of my anima  
Hiding beneath my outward persona!.



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# RESEARCH SNIPPETS

**Objectivity, Sensitivity and specificity are important measures to ascertain the validity of a research instrument.**

**Objectivity** : It means the ability of the tool to yield a correct score independent of any personal judgment or bias eg: Numerical intensity pain scale(NIPS) to determine pain experienced as against mild, moderate or severe.

**Sensitivity and specificity** are measures of validity used in biomedical sciences. They measure the characteristics of diagnostic tools used to detect disease. eg.mammography for detecting Breast Cancer

**Sensitivity** – The capacity of the instrument to detect the disease if it is present – Its rate of yielding “ true positives” and avoiding “false negatives”. Sensitivity is the ability to detect cases

**Specificity** – The capacity of the instrument to definitely conclude that the disease is not present when it is not – its rate of yielding “ true negatives” and avoiding “false positives”. **Specificity** is the ability to detect non-cases

Both sensitivity and specificity are needed to be confident that the results accurately represent the distribution of the disease in the sample.

		Truth		
		Disease (number)	Non Disease (number)	Total (number)
Test Result	Positive (number)	<b>A</b> (True Positive)	<b>B</b> (False Positive)	$T_{\text{Test Positive}}$
	Negative (number)	<b>C</b> (False Negative)	<b>D</b> (True Negative)	$T_{\text{Test Negative}}$
		$T_{\text{Disease}}$	$T_{\text{Non Disease}}$	Total

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# IG NOBEL

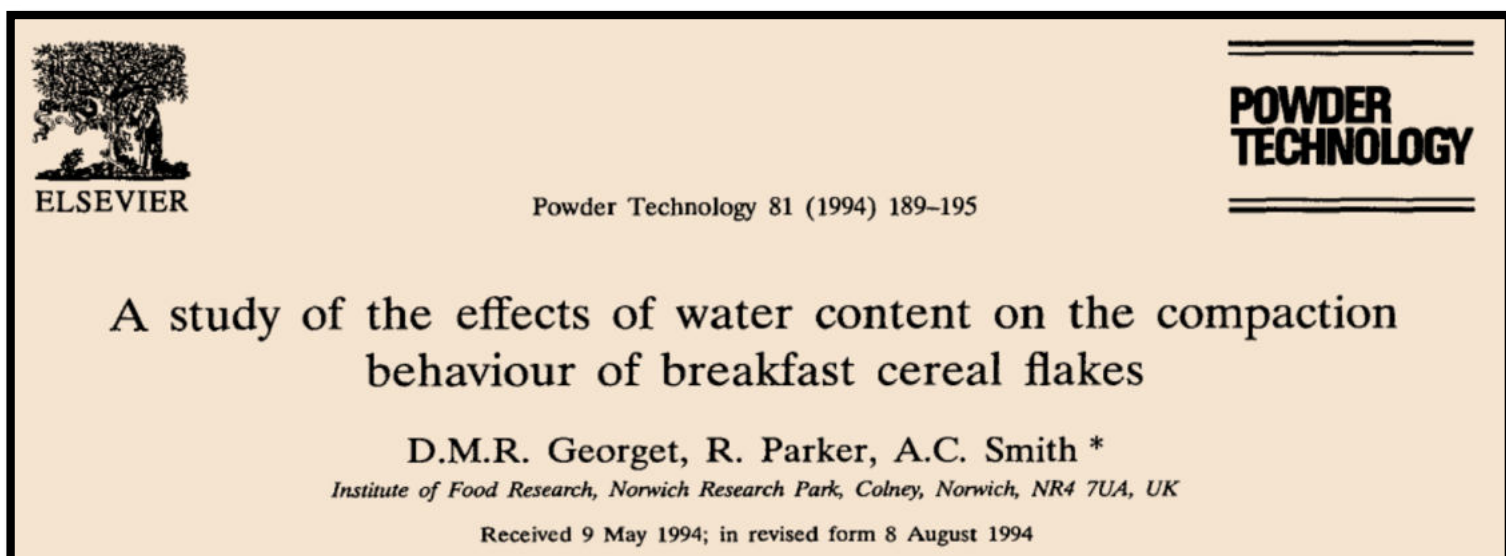


## 1995 - PHYSICS

### D.M.R. Georget, R. Parker, and A.C. Smith

#### Compaction Behaviour of Breakfast Cereal Flakes

D.M.R. Georget, R. Parker, and A.C. Smith, of the Institute of Food Research, Norwich, England, were awarded IgNobel, for their rigorous analysis of soggy breakfast cereal, published in the report entitled "A Study of the Effects of Water Content on the Compaction Behaviour of Breakfast Cereal Flakes."



Wheat breakfast flakes were compacted in a cylindrical geometry using two different techniques and the volume measured as a function of applied pressure from 100 Pa to 85 MPa. The effect of water content, in the range 4 to 18% (wet weight basis), on the compaction behaviour of the flakes was examined for pressures from 1 to 85 MPa.





## Department of Transfusion medicine and Immunohematology in SJMCH

### The Department

The department of transfusion medicine and Immunohematology provides diagnostic services to the hospital. They are also involved in teaching undergraduate & postgraduate medical, paramedical & nursing students and clinical research. The department was originally functioning as the department of Clinical Pathology and Blood Bank. It has been an integral part of the hospital.

The sections of Haematology and Clinical Pathology laboratory, Phlebotomy, Blood Bank and molecular diagnostic laboratory come under the umbrella of this department

Well equipped laboratory is NABL accredited for the last 10 years and is managed by a team of well qualified and experienced teaching faculty, trained technical staff.

The department is currently headed by Dr.Sitalakshmi Subramanian



## Transfusion medicine & Immunohematology

### SERVICES OFFERED:

1. The Haematology and Clinical Pathology laboratory provides 24 hour routine and special diagnostic services for patient care.
2. The phlebotomy section provides blood sample collection facility for the outpatients
3. The Blood Bank works 24 x7 to cater to the blood component requirements of the hospital
4. The Haematology laboratory is a referral lab for the following
  - a) Investigation of bleeding and thrombotic disorders
  - b) Thalassemia and haemoglobinopathies
  - c) Haematological malignancies like leukaemia and lymphomas
  - d) Paroxysmal nocturnal haemoglobinuria
  - e) immunodeficiency disorders
  - f) Other haematological disorders like aplastic anemia, myelodysplastic syndromes



### TIMING & LOCATION:

Location: Ground floor Hospital

Timing: 24 hours/ 365 days



## Transfusion medicine & Immunohematology

### RECENT UPDATES AND EFFORTS TO PROVIDE EFFICIENT AND TIMELY SERVICES

- The phlebotomy section has been recently renovated to reduce waiting time.
- New renovated facility is air-conditioned well lit, facilitates easy wheelchair access and has separate entry and exit.
- In Haematology laboratory automated haematology and coagulation analysers contribute to the efficiency of the laboratory by enabling traceability, appropriate quality control measures that are incorporated and reduced turnaround time.
- The laboratory has recently acquired a 10 colour flow cytometry which has the capability of performing extensive immunophenotypic analysis which is the mainstay in the diagnosis of several haematological disorders.
- The laboratory supports stem cell transplants by facilitating stem cell collections by apheresis and stem cell enumeration by flow cytometry.

### THE BLOOD BANK

The Blood Bank is licensed by the drugs control department (Govt. of Karnataka) and offers 24 hour blood transfusion support to the entire hospital.

Blood Bank services in St John's was one of the first few to prepare components and have been preparing components since 1990. Currently, 99% of the blood collected is used for blood component preparation

Apheresis facility was established in the year 1999 and plateletpheresis is routinely performed. The blood components are leucoreduced routinely to enhance blood safety. The immunohaematology laboratory is well equipped to resolve blood group discrepancies and identify unexpected antibodies that contribute to incompatible crossmatches. All the blood components are screened for transfusion transmissible infections by chemiluminescence. Voluntary blood donation camps are conducted regularly to meet the transfusion requirements of the hospital. Transfusion support is provided to patients with thalassemia and other related disorders who require lifelong blood transfusion.

## Transfusion medicine & Immunohematology

### THE MOLECULAR DIAGNOSTIC LABORATORY

The molecular diagnostic laboratory is at its infancy and provides molecular diagnostic tests for Chronic myeloid leukaemia and myeloproliferative neoplasms. The laboratory is working towards setting up an inhouse HLA laboratory.

### RESEARCH WORK, TEACHING & TRAINING:

Besides diagnosis, research projects are being conducted as a part of training postgraduate and PhD students. Some of the projects are funded by RGUHS and DBT.

Being an integral part of the medical college, the department is actively involved in training undergraduate and postgraduate medical courses like MBBS, MD pathology. Postgraduates from other specialities are also posted for training. The faculty are actively involved in training allied health science students for B.Sc MLT courses, B.Sc allied health sciences, nursing students and M.Sc MLT courses.

MD Transfusion medicine and Immunohaematology has been recently introduced to train medical graduates in the field of transfusion medicine. Regular workshops and CME programs are conducted to facilitate training.





# Know Your Hospital!

## Transfusion

MEDICINE

### Department of **Transfusion medicine** and **Immunohematology** in SJMCH

#### THE TEAM



MEDICINE



## Transfusion





# GREY *Matters!*



1. Where is the Macintosh blade inserted during intubation?

- A. Larynx
- B. Epiglottis
- C. Vallecula
- D. Trachea

2. What airway technique do you use when you have a 50year old male patient who was involved in a RTA and is unresponsive.

- A. Jaw thrust maneuver
- B. Nasal airway
- C. Oral airway
- D. Head tilt chin lift

3. What are the 7 D's of Stroke Care?

- A. Detection, Dispatch, Delivery, Door, Data, Decision, Drug
- B. Dispatch, Door, Date, Detection, Drug, Diazepam, Delivery
- C. Dispatch, Door, Date, Deceleration, Drug, Decision, Diazepam
- D. Detection, Dispatch, Delivery, Data, Decision, Drug, Diazepam

4. Which location of fracture has a greater chance of blood vessels and nerve damage?

- A. Long bone shaft
- B. Tendon
- C. Joint
- D. Ligament

5. What is helpful to reduce intracranial pressure?

- A. Hyperadministration
- B. Hypoadministration
- C. Hypoventilation
- D. Hyperventilation

## CRACK THE QUIZ!!!

"Questions for both medics and paramedics"

6. During which phase of a grandmal seizure is the patient confused and fatigued?

- A. Aura
- B. Clonic
- C. Hypertonic
- D. Postical

7. What is the adult dose for activated charcoal?

- A. 30-40mL
- B. 60-100mL
- C. 50-100g
- D. 150-300g

8. Passive rewarming of a hypothermic patient includes?

- A. Placing heat packs near the axillary or groin area
- B. Removing wet clothes
- C. Adding insulation to prevent further heat loss
- D. None of the above

9. Infants are obligatory what kind of breathers?

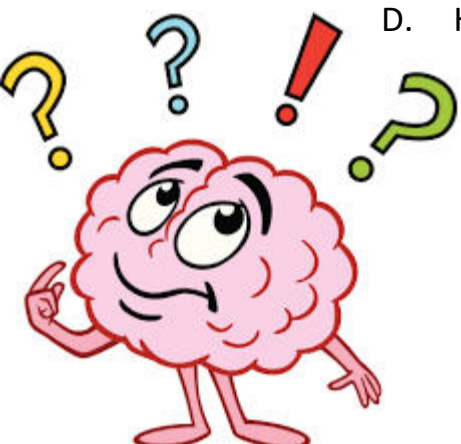
- A. Nose
- B. Mouth

10. What leads will you see lateral problems in?

- A. Leads I, aVL, aVR, V4
- B. Leads I, aVL, V5, V6
- C. Leads I, aVL, aVF, V5
- D. Leads I, aVL, V2, V1

[CLICK HERE FOR ANSWERS](#)

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# Team of The Month



## **HOSPITAL CHEFS**

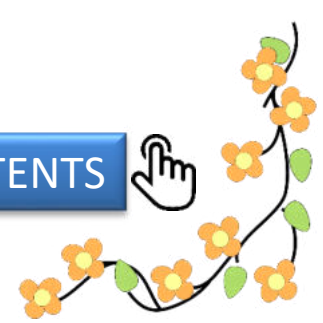
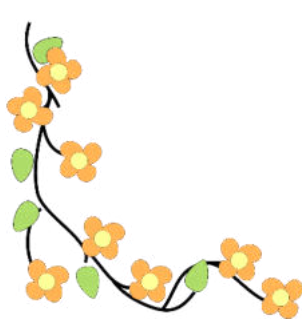
### **Dietary department**



Food service is one of the most important activities in any hospital. As a therapeutic measure, it contributes directly through scientifically prepared nutritious diets, aimed at specific disease conditions. It is a most potent psychological force in patient satisfaction, patient acceptance of hospital regime resulting in fast recovery, employee satisfaction and morale and also plays a major role as a general public relations measure.

The department of dietary in St.John's was established in the year 1963 and is presently guided by Rev. Fr. Jesudoss Rajamanikam [Associate Director of Finance] and dietary incharge Sr.Sophy.K.A. This department serves food for more than 1500 people which includes priests, religious sisters, staff nurses, undergraduate and postgraduate students, hospital faculty and allied health personnel. Thus, the nutritious, attractive and palatable food to patients and staff is prepared by our hospital cooks under the guidance of Dieticians and the Dietary in-charge.

The department utilizes 11 cooks and 15 assistant cooks, of which, 2 cooks along with 2 assistant cooks are posted in nightingale dietary and the rest 9 cooks along with 13 assistant cooks work in Hospital dietary. They work in 3 shifts. [5am-1pm; 10.30am-6.30pm; and 12noon-8pm]







# Team of The Month

## HOSPITAL CHEFS



They are divided as patient cooks, faculty cooks and executive cooks, where patient cook is under the supervision of Dietician and faculty and executive cook is under the guidance of Dietary in-charge.

### Preparation and cooking

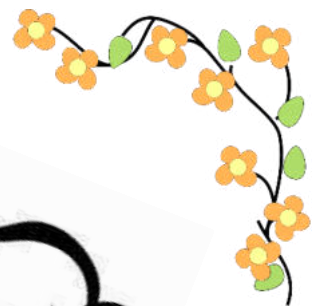
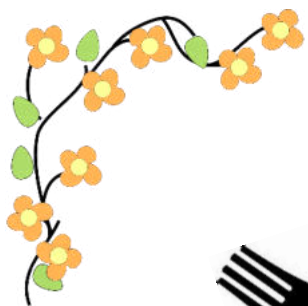
Registration assistants prepare the list of diets/food (normal) needed for the day based on the number of attendants. Based on the recommended dietary allowance [RDA] and patient's BMI, therapeutic food is prepared as per dietician's instructions. This list is handed over to the cooks. Based on the number of diets and patients/attendants, the cook will make a list of the ingredients with the quantity required for cooking. The helpers take this ingredient list to the kitchen store supervisor for procuring the ingredients.



Pre-preparation of cooking is done by peeling, washing, cutting, thawing based on the food preparation and food is cooked according to the standardized recipes. Various types of therapeutic diets includes diabetic low salt diet, bland diet, renal diet, low fat, high protein diet, salt restricted diet, Jain diet, RT feed, neutropenic diet, clear liquids and semi-solid diet







# Team of The Month

## HOSPITAL CHEFS



### Sensory evaluation of food

All the food that is prepared is checked for taste, quality and texture by the dietician [therapeutic food] and Dietary in-charge [normal food].



Each cooked item [sample] is kept in the cooler for quality check and all the left-over food which could be preserved are coded and kept in the cooler. A regular medical checkup is compulsory for all the kitchen staff. The menu for both dining halls is periodically reviewed and alterations are made based on the recommendation of the nutrition department.

**For Further Queries  
dial 312/5217/5218**







# Team of The Month



## **HOSPITAL CHEFS**

### **Dietary department**



Team members: Mathesan, Bhaskar, Sagayaraj, Arokiaswamy, Silambarasan, Sr. Sophy, Mani Megalai, Sagayamary , Saral, Gnanamary , Leema, Yesumani  
Last row-Perumal, Shankaran, Joseph Rosario, Purushothaman, Nelson, Narayanan







**LAUGHTER IS THE  
BEST MEDICINE...**



The patient sitting on this chair finds the pain more bearable when I extract his tooth.



He's so obstinate! I begged and pleaded with him not to visit his constituency.....



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Best of RK Laxman,  
Times of India



# New Section!!!

## “ST. JOHN’S FOUNTAINHEAD”

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Articles published in the year 2018  
(1<sup>st</sup> January to 31<sup>st</sup> December 2018)



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## Analgesic and Opioid Use in Pain Associated with Head-and-Neck Radiation Therapy

Sandeep Muzumder, S Nirmala, HU Avinash, MG John Sebastian, and Prashanth Bhat Kainthaje

Department of Radiation Oncology, St. John's Medical College and Hospital, Bengaluru, Karnataka, India

### Abstract

**Aim:** The aim of the study is to find the incidence of analgesic and opioid use in pain associated in HNC patient undergoing radiation therapy.

**Background:** Radiation therapy with concurrent chemotherapy has become the standard of care in head and neck cancer. Acute toxicity like mucositis and dysphagia has increased with aggressive therapy. Pain is an invariable accompaniment of oropharyngeal mucositis, which leads to decreased quality of life and treatment break.

**Materials and Methods :** This is a retrospective review of radiation charts of head and neck patients treated from January 2013 to June 2017 at St. John's Medical college and Hospital, Bengaluru.

**Results:** A total of 138 (92%) patients required analgesia during the radiation course. The analgesic consumption started increasing from week 2, peaked at week 5, persist for 6 weeks and started declining after week 10. 52% patients required opioids, especially from week 4 to week 8. 15% of patients required Morphine, the maximum use in week 6 to week 8. The use of chemotherapy ( $P = 0.031$ ), presence of grade 3 mucositis ( $P = 0.010$ ) and grade 3 dysphagia ( $P = 0.001$ ) were significantly associated with severe pain (use of strong opioids). All 80 (100%) patients receiving concurrent chemotherapy required analgesia. More than 80% patients required opioids and one fourth required strong analgesic in concurrent chemotherapy group.

**Conclusion :** More than 90% of all head and neck cancer patient undergoing radiation therapy experience therapy related pain for more than 6 weeks. 53% of the patients require opioids and 15% require strong opioids. The use of concurrent chemotherapy was significantly associated with severe pain.

Indian J Palliat Care. 2018 Apr-Jun; 24(2): 176–178.doi: 10.4103/IJPC.IJPC\_145\_17

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## Monitoring whole-lung lavage using lung ultrasound: The changing phases of the lung.

Ramachandran P<sup>1</sup>, Chaudhury A<sup>1</sup>, Devaraj U<sup>1</sup>, Maheshwari KU<sup>1</sup>, D'Souza G<sup>1</sup>.

<sup>1</sup> Department of Pulmonary Medicine, St. John's National Academy of Health Sciences, Bengaluru, Karnataka, India.

### Abstract

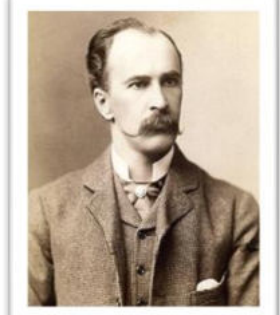
Lung ultrasound (LUS) has been proven to yield valuable information for lung and pleural pathology. It is well validated for assessing extravascular lung water. It can also be used to monitor stages of controlled lung de-aeration in whole lung lavage (WLL) which is the treatment for Pulmonary Alveolar Proteinosis (PAP), characterized by abnormal surfactant in the alveoli affecting gas exchange. LUS can help decide the point of termination of lung flooding. A 55 year old lady with biopsy proven pulmonary alveolar proteinosis presented with respiratory failure. WLL was planned. LUS was used to study the stages of lung flooding as previously described for ARDS model. 6 areas screened based on six areas that are normally examined like upper zone, mid zone and lower zone showed alveolar interstitial pattern. One lung ventilation (OLV) was done and isolation of lavage lung was confirmed which was seen as lung collapse (lung pulse) on LUS. Saline infusion resulted in increase in B lines followed by tissue like pattern with fluid bronchogram on LUS (alveolar flooding) in all the areas. During the lavage of the second lung, appearance of alveolar flooding pattern resulted in termination of saline infusion. The use of LUS in monitoring WLL reduced amount of saline used for lavage, pick up complications like pleural effusion and spillage.

Lung India. 2018 Jul-Aug;35(4):350-353. doi: 10.4103/lungindia.lungindia\_344\_17.

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# THE QUOTABLE OSLER



SIR WILLIAM OSLER

## Acquire the art of detachment:

In the first place, acquire early the Art of Detachment, by which I mean the faculty of isolating yourselves from the pursuits and pleasures incident to youth. By nature man is the incarnation of idleness, which quality alone, amid the ruined remnants of Edenic characters, remains in all its primitive intensity. Occasionally we do find an individual who takes to toil as others to pleasure, but the majority of us have to wrestle hard with the original Adam, and find it no easy matter to scorn delights and live laborious days.



© <http://www.onedreamworld.com/2009/04/how-to-be-detached.html>

REF: The Quotable OSLER: Edited by Mark E Silverman, T. Jock Murray, Charles. S Bryan



## MEDICINE DIS WEEK

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*A Bird's Eye View.....*

### **Wider resection margins do not improve outcomes in cutaneous melanoma.**

For localized cutaneous melanoma thicker than 2 mm of the trunk or extremities, the suggested minimum safe margin of resection is 2 cm in guidelines worldwide. In a multicentric randomized trial comparing a 2 versus 4 cm resection margin in 936 patients, overall and melanoma-specific survival was similar in both groups at a median follow-up of 19.6 years. This long-term data supports the current margin recommendations for primary melanomas of >2 mm thickness.

- Utjés D et al. Lancet. 2019 Jul 4. pii: S0140-6736(19)31132-8.

### **Intensive glycemic control does not benefit in acute stroke.**

Hyperglycemia is associated with poor outcomes after acute ischemic stroke, but small trials have suggested that tight glucose control with intravenous insulin is not beneficial and might be harmful. Adding to this evidence, a multicenter trial of over 1100 acute stroke patients found that insulin infusion therapy with a target glucose of 80 to 130 mg/dL did not improve 90-day functional outcomes compared with subcutaneous insulin on a sliding scale with a target glucose of 80 to 179 mg/dL. Furthermore, treatment withdrawal for hypoglycemia or other adverse events was more common in the intensive treatment group. These findings confirm that intensive treatment of hyperglycemia with insulin infusion has no role in the setting of acute stroke. Nevertheless, in agreement with current guidelines, it is reasonable to treat severe hyperglycemia (glucose >180 mg/dL [>10 mmol/L]) with standard interventions such as subcutaneous insulin.

- Johnston KC et al., JAMA. 2019;322(4):326. [Uptodate](#)



# 2-cm versus 4-cm surgical excision margins for primary cutaneous melanoma thicker than 2 mm: long-term follow-up of a multicentre, randomised trial



Deborah Utjés\*, Jonas Malmstedt\*, Jüri Teras, Krzysztof Drzewiecki, Hans Petter Gullestad, Christian Ingvar, Hanna Eriksson†, Peter Gillgren†

## Summary

**Background** The optimal surgical excision margins are uncertain for patients with thick (>2 mm) localised cutaneous melanomas. In our previous report of this multicentre, randomised controlled trial, with a median follow-up of 6·7 years, we showed that a narrow excision margin (2 cm vs 4 cm) did not affect melanoma-specific nor overall survival. Here, we present extended follow-up of this cohort.

**Methods** In this open-label, multicentre randomised controlled trial, we recruited patients from 53 hospitals in Sweden, Denmark, Estonia, and Norway. We enrolled clinically staged patients aged 75 years or younger diagnosed with localised cutaneous melanoma thicker than 2 mm, and with primary site on the trunk or upper or lower extremities. Patients were randomly allocated (1:1) to treatment either with a 2-cm or a 4-cm excision margin. A physician enrolled the patients after histological confirmation of a cutaneous melanoma thicker than 2 mm. Some patients were enrolled by a physician acting as responsible for clinical care and as a trial investigator (follow-up, data collection, and manuscript writing). In other cases physicians not involved in running the trial enrolled patients. Randomisation was done by telephone call to a randomisation office, by sealed envelope, or by computer generated lists using permuted blocks. Patients were stratified according to geographical region. No part of the trial was masked. The primary outcome in this extended follow-up study was overall survival and the co-primary outcome was melanoma-specific survival. All analyses were done on an intention-to-treat basis. The study is registered with ClinicalTrials.gov, number NCT03638492.

**Findings** Between Jan 22, 1992, and May 19, 2004, 936 clinically staged patients were recruited and randomly assigned to a 4-cm excision margin (n=465) or a 2-cm excision margin (n=471). At a median overall follow-up of 19·6 years (235 months, IQR 200–260), 621 deaths were reported—304 (49%) in the 2-cm group and 317 (51%) in the 4-cm group (unadjusted HR 0·98, 95% CI 0·83–1·14; p=0·75). 397 deaths were attributed to cutaneous melanoma—192 (48%) in the 2-cm excision margin group and 205 (52%) in the 4-cm excision margin group (unadjusted HR 0·95, 95% CI 0·78–1·16, p=0·61).

**Interpretation** A 2-cm excision margin was safe for patients with thick (>2 mm) localised cutaneous melanoma at a follow-up of median 19·6 years. These findings support the use of 2-cm excision margins in current clinical practice.

**Funding** The Swedish Cancer Society, Stockholm Cancer Society, the Swedish Society for Medical Research, Radiumhemmet Research funds, Stockholm County Council, Wallström funds.

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## Introduction

The incidence of invasive cutaneous melanoma has increased worldwide, especially in white populations.<sup>1,2</sup> The initial surgical excision of the primary melanoma, guided by tumour thickness according to Breslow's depth, is critical for the management of melanoma.<sup>3–6</sup> The ultimate aim of surgical excision is to improve disease outcome and reduce the risk of complications by use of smaller surgical margins.<sup>7</sup> Therefore, the width of the resection margins is of high importance in primary melanoma.

The risk of recurrence with a narrow margin must thus be balanced against the excess morbidity from larger skin defects after wider excision. Over time, and in light of the findings of several randomised studies,<sup>8–10</sup> less extensive surgery for primary melanoma with tumour

thickness greater than 2 mm has become more established, although evidence to support this approach has been challenged.<sup>6,11</sup> Most recent guidelines advocate a 2-cm margin for tumours thicker than 2 mm, including the American National Comprehensive Cancer Network and American Academy of Dermatology guidelines.<sup>12,13</sup> The British National Institute for Health and Care Excellence guideline<sup>14</sup> for melanoma changed recommendations from a 3-cm margin to a 2-cm margin for all tumours thicker than 2 mm in 2015, whereas Australian guidelines suggest a less extensive 1-cm margin for melanomas with thickness 4 mm or less and a margin of 2-cm for thicker melanomas (in this case >4 mm).<sup>4,6</sup> Several randomised controlled trials have addressed the issue of appropriate margins for localised thick melanoma.<sup>8–11,15,16</sup> Hayes and colleagues<sup>11</sup> questioned whether a

*Lancet* 2019; 394: 471–77

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See [Comment](#) page 445

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JAMA | Original Investigation

# Intensive vs Standard Treatment of Hyperglycemia and Functional Outcome in Patients With Acute Ischemic Stroke

## The SHINE Randomized Clinical Trial

Karen C. Johnston, MD; Askiel Bruno, MD; Qi Pauls, MS; Christiana E. Hall, MD; Kevin M. Barrett, MD; William Barsan, MD; Amy Fansler, MPH; Katrina Van de Bruinhorst, MA; Scott Janis, PhD; Valerie L. Durkalski-Mauldin, PhD; for the Neurological Emergencies Treatment Trials Network and the SHINE Trial Investigators

[+ Supplemental content](#)

**IMPORTANCE** Hyperglycemia during acute ischemic stroke is common and is associated with worse outcomes. The efficacy of intensive treatment of hyperglycemia in this setting remains unknown.

**OBJECTIVES** To determine the efficacy of intensive treatment of hyperglycemia during acute ischemic stroke.

**DESIGN, SETTING, AND PARTICIPANTS** The Stroke Hyperglycemia Insulin Network Effort (SHINE) randomized clinical trial included adult patients with hyperglycemia (glucose concentration of >110 mg/dL if had diabetes or  $\geq$ 150 mg/dL if did not have diabetes) and acute ischemic stroke who were enrolled within 12 hours from stroke onset at 63 US sites between April 2012 and August 2018; follow-up ended in November 2018. The trial included 1151 patients who met eligibility criteria.

**INTERVENTIONS** Patients were randomized to receive continuous intravenous insulin using a computerized decision support tool (target blood glucose concentration of 80-130 mg/dL [4.4-7.2 mmol/L]; intensive treatment group: n = 581) or insulin on a sliding scale that was administered subcutaneously (target blood glucose concentration of 80-179 mg/dL [4.4-9.9 mmol/L]; standard treatment group: n = 570) for up to 72 hours.

**MAIN OUTCOMES AND MEASURES** The primary efficacy outcome was the proportion of patients with a favorable outcome based on the 90-day modified Rankin Scale score (a global stroke disability scale ranging from 0 [no symptoms or completely recovered] to 6 [death]) that was adjusted for baseline stroke severity.

**RESULTS** Among 1151 patients who were randomized (mean age, 66 years [SD, 13.1 years]; 529 [46%] women, 920 [80%] with diabetes), 1118 (97%) completed the trial. Enrollment was stopped for futility based on prespecified interim analysis criteria. During treatment, the mean blood glucose level was 118 mg/dL (6.6 mmol/L) in the intensive treatment group and 179 mg/dL (9.9 mmol/L) in the standard treatment group. A favorable outcome occurred in 119 of 581 patients (20.5%) in the intensive treatment group and in 123 of 570 patients (21.6%) in the standard treatment group (adjusted relative risk, 0.97 [95% CI, 0.87 to 1.08],  $P = .55$ ; unadjusted risk difference, -0.83% [95% CI, -5.72% to 4.06%]). Treatment was stopped early for hypoglycemia or other adverse events in 65 of 581 patients (11.2%) in the intensive treatment group and in 18 of 570 patients (3.2%) in the standard treatment group. Severe hypoglycemia occurred only among patients in the intensive treatment group (15/581 [2.6%]; risk difference, 2.58% [95% CI, 1.29% to 3.87%]).

**CONCLUSIONS AND RELEVANCE** Among patients with acute ischemic stroke and hyperglycemia, treatment with intensive vs standard glucose control for up to 72 hours did not result in a significant difference in favorable functional outcome at 90 days. These findings do not support using intensive glucose control in this setting.

**TRIAL REGISTRATION** ClinicalTrials.gov Identifier: [NCT01369069](#)

JAMA. 2019;322(4):326-335. doi:[10.1001/jama.2019.9346](#)

**Author Affiliations:** Author affiliations are listed at the end of this article.

**Group Information:** The members of the Neurological Emergencies Treatment Trials Network and the SHINE Trial Investigators appear in [Supplement 3](#).

**Corresponding Author:** Karen C. Johnston, MD, University of Virginia, 1215 Lee St, Charlottesville, VA 22911 ([kj4v@virginia.edu](mailto:kj4v@virginia.edu))

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jama.com





## THE EVOLUTION OF SHOCK THERAPY

Manfred Sakel discovered that the physical shock caused by an overdose of insulin, although dangerous, sometimes had positive benefits in the Treatment of schizophrenia. Ladislaus Joseph von Meduna devised another shock treatment, with camphor as the agent, but this often produced convulsions so violent that patients suffered broken bones. Eventually, in 1938, Italian psychiatrist Ugo Cerletti used electric shocks to produce seizures. Today, his electro-convulsant therapy (ECT), is still used in parts of the world to treat severe depression.

The Portuguese neuro-psychiatrist Egas Moniz, impressed by the disappearance of aggression in animals after removal of the frontal lobes of their brains, performed the first lobotomy on a human in 1935. The procedure became standard in patients resistant to shock therapy. Although Moniz was awarded the Nobel prize in 1949 for this surgical development, the irreversible operation was eventually seen as almost as bad as the mental disorders it treated, and it fell out of favour.



Manfred Sakel



Ladislaus J Meduna



Egas Moniz



Cerletti's ECT machine preserved at Museo di Storia della Medicina in Rome



Ugo Cerletti

CONTENTS



## PEARLS OF WISDOM

Nothing can make our life, or the lives of other people, more beautiful than perpetual kindness.

- Leo Tolstoy



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Be the change you want to see in the world.

- Mahatma Gandhi

Life can only be understood backwards; but it must be lived forwards.

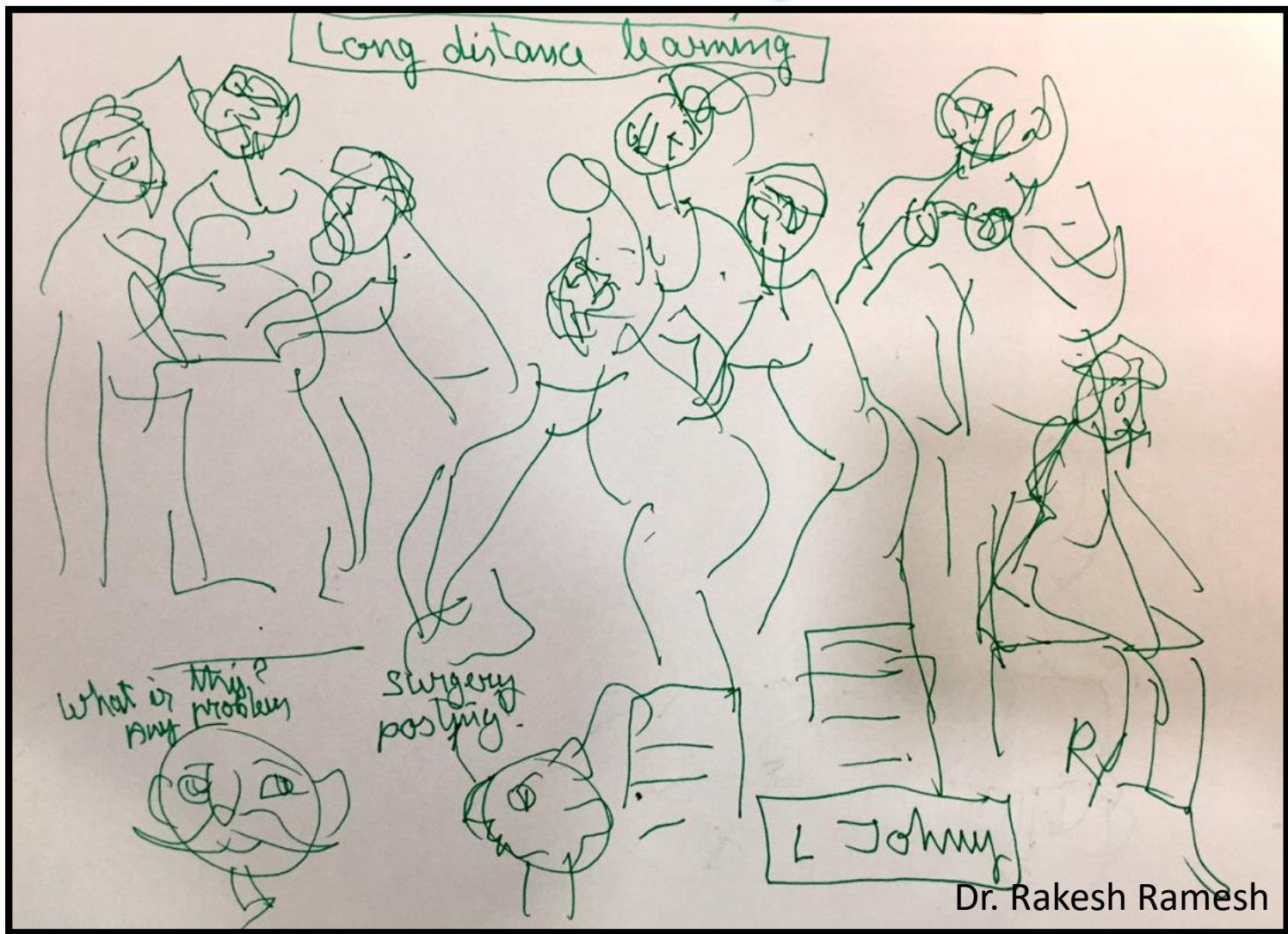
- Soren Kierkegaard



© Medium



# L Johnny



## Did You Know?

The term 'monsoon' does not mean rain, actually, it refers to the strong winds that blow from cold to hot places. The term 'monsoon' comes from the Arabic 'mausim' that means season or a shift in wind. Lightning strikes about 5,00,000 times during the monsoon. Lightning ranks number one amongst the natural calamities in India, averaging 1,755 deaths per year. India's very first monsoon forecast was made on 4th June 1886. From 1871 till 2006, monsoon has been normal 94 times, while there were 23 drought years. India's summer monsoon represents one of the most dramatic seasonal weather changes in the world. Even a slight shift in its pattern can lead to drought or floods, and have real implications on food production. Monsoon betting market in India is worth Rs. 25000 crore , although illegal. Bookies base their predictions by following the forecast of Colaba Weather Bureau & International Meteorological Charts.

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**DO YOU HAVE ANY INTERESTING CONTENT TO BE  
PUBLISHED?**

Write to Dr. Avinash. H. U: [avinash.hu@stjohns.in](mailto:avinash.hu@stjohns.in)



# GREY *Matters!*



QUIZ ANSWERS

1. C
2. A
3. A
4. C
5. D
6. D
7. C
8. C
9. A
10. B

[CLICK HERE TO GO BACK TO THE QUESTION!](#)

