



AMRITA Medical Newsletter

Initiative of Amrita Institute of Medical Sciences, Kochi.

Affiliated to Amrita University

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From the Editor's desk.....

As we look back since the momentous inauguration of this institution in the year 1998, the driving force behind this edifice of love has always been the compassion of Mata Amritanandamayi Devi, lovingly revered across the globe as Amma. Her vision and constant encouragement created this facility with the sole objective of relieving the suffering of individuals and their families. Amma's inspiring life of selfless service has not only cured physical illness, but also brought about hope, solace and peace of mind to so many.

Laurel after laurel have followed this institution; to mention a few, being awarded the ISO 9001:2008, National Accreditation Board for Laboratories (NABL), National Accreditation Board for Hospitals (NABH), National Healthcare Excellence award in 2013 for the Best Hospital in India and yet another Healthcare Excellence award in 2016, in categories of Excellence in patient safety and Innovation in medical technology... the list is only set to grow bigger in the years to come. The latest to be added to the much acclaimed infrastructure are the Tesla silent MRI, Da Vin-

ci Surgical System (a robotic surgical platform) and ROSA-Robotic Surgical Assistant. Foundation Stone was laid for a second medical school with 2000 bed hospital at Delhi in May 9th 2016.

The revolution in medicine currently underway is an outgrowth of the Human Genome Project. It will profoundly enhance our understanding of disease and transform the practice of medicine. But this progress has made new demands on the nation's medical educational system and the investment in medical technology required to train the new generation of doctors who are the torch bearers to the future. We firmly believe that this institution is ideally suited to meet the existing and the upcoming challenges. The management and faculty take this opportunity to reiterate full support in preparing our students and doctors to serve people. The grace that created this institution, will certainly guide us in our path to serve humanity even more and in the process, help each of us realize the true worth of being human.

Coconut Oil : what research reveal?

Dr. D.M. Vasudevan, Emeritus Professor, Head- PG Programs & Research, AIMS.

Background

The health and nutritional benefits of coconut oil have been recognized for centuries. However, in recent decades, the reputation of coconut oil has been clouded by the propaganda about its relation with atherosclerosis and heart attacks.



This misconception arose because 50 years back, it was known that saturated fatty acids (SFA) increase cholesterol and will adversely affect the heart. Since coconut oil contains saturated fatty acids, it was assumed that coconut oil is

also bad to heart. But about 25 years back, it has been shown that coconut oil contains medium chain fatty acids (MCFA). Later, it has been proved that the metabolism of MCFA is drastically different from SFA. MCFA is directly absorbed to blood, does not need lipoproteins and immediately utilized for energy purposes, so is not deposited in tissues. With this background, we had done a lot of work at the Amrita Institute of Medical Sciences, Kochi.

Animal studies

Our studies on animals showed that coconut oil intake did not cause hypercholesterolemia. The lipoprotein levels and cholesterol levels are the same in sunflower fed animals and in coconut oil fed animals

Normal Human subjects

These studies were extended to human beings also. Serum samples were anal-

ysed from 302 normal healthy persons, out of which 152 were consuming coconut oil and 150 were using sunflower oil for the past 2 years or more. There were no statistically significant differences in the cholesterol, HDL or LDL levels in coconut oil consuming population versus sunflower oil consuming population

Cardiac patients

Further, lipid profile in serum was analysed in 76 coronary artery disease patients, out of which 41 were used to take coconut oil and 35 were used to take sunflower oil atleast for the past 2 years. There was no statistically significant difference in the cholesterol, HDL or LDL levels in coconut oil consuming population versus sunflower oil consuming population. Most importantly, lipid profile or oxidative stress parameters did not show significant changes between coconut oil and sunflower oil groups.

Analysis of plaques

At Amrita Medical School, we have analyzed the fatty acid composition of the plaques taken from diseased arteries. A total of 71 samples of plaques were analysed, of which 48 persons were using coconut oil and 23 persons were using sunflower oil routinely. Plaques did not contain significant amounts of fatty acids from coconut oil. Instead, palmitic acid and stearic acid (long chain saturated fatty acids) were the main ingredients of these plaques. Fatty acid content of plaques from coconut oil consuming group and sunflower consuming group

were the same. This clearly shows that coconut oil does not have an effect to produce plaque or heart disease.

Prospective Random controlled study

As continuation of these findings, a large scale randomized case control study comparing the impact of coconut oil versus sunflower oil as a cooking medium on the cardiovascular events and risk factors was done. Two hundred patients with heart diseases were enrolled for a 2 years follow up. At the end of the study period, conventional atheroscle-

rotic risk factors were again shown to be the same in both groups. High sensitive CRP (hsCRP) (an important inflammatory marker for future heart attack) was also found to be the same level in both coconut oil users and sunflower oil users. The clinical outcome like death, Myocardial infarction and Stroke were not different in both groups.

Conclusion

In patients with Coronary artery disease along with standard medications coconut oil as a cooking oil media does not affect the serum cholesterol and associated risk factors.



World Bioethics Day

AIMS unit of UNESCO Bioethics Chair, celebrated the World Bioethics Day on 19th Oct 2016. The Theme was "Human Dignity and Human Rights" to mark the adoption of Universal Declaration on Bioethics and Human Rights. The Guest

oration was delivered by leading legal luminary, Padmashree Dr Madhavan Menon on "Health as a fundamental right". Debates, poster/essay competitions and panel discussions marked the event.

Dr. Chandrasekhar.J.



At the initiative of the Vice-Chancellor of Amrita University, Dr. Venkat Rangan, Research Synergy Day was held

RESEARCH SYNERGY DAY Collaborate - Innovate - Translate

on Oct 7th 2016. This was to harness the collective knowledge from the two major streams of medicine and engineering respectively. The international panel, via video-conferencing was lead by the keynote speaker Dr. Atul Buttee, UCSF, who enlightened the audience

about "translating a trillion points of data into therapies, diagnostics & new insights into disease". Dedicated panel discussions were held for various specialities and also from the industry. A talk on Pharmaco-genomics was delivered as well.

Sivakumar V.

Acute Liver Failure : A Surgical Perspective

Dr. S. Sudhindran, Clinical Professor, Dept of GI Surgery AIMS.



Introduction

Acute liver Failure is the clinical manifestation of sudden and severe hepatic

injury and has varied causes. Due to a rapid deterioration of hepatic metabolic and immunological function, it manifests as hepatic encephalopathy, coagulopathy and the dreaded complication of Multi Organ Dysfunction Syndrome, which generally has a fatal outcome. It is the leading cause for emergency liver transplantation the world over.

In the past two decades, significant insight has been gained in knowing the causes and pathogenesis of acute liver failure. With Liver Transplantation being the only modality to offer a defin-

itive treatment in most cases, the role of the surgeon has been significant.

Hepatitis viruses are the most common cause for acute liver failure in North India, where a majority of the studies have been carried out. These reports have identified hepatitis viruses (A,B,D and E) and Anti-tubercular drug hepatotoxicity as the etiological agent in 90% of patients with acute liver failure. India is estimated to have approximately 40 million hepatitis B and 10 million hepatitis C infected subjects.

On evaluation of cases that underwent liver transplant for acute hepatic failure in our centre, the causes were consumption of Zinc or Aluminium Phosphide toxicity (rodenticide poison) in 44% of the patients, followed by sero-negative hepatitis in 24% and toxicity due to anti-tubercular medication in 12%. Hepatitis A and B formed a total of 20% of all cases.

When to proceed to Liver Transplantation?

Given that the only proven beneficial therapeutic intervention in advanced acute liver failure is liver transplantation, the timing of transplantation and selection of patients are crucial.

A false-negative selection can result in a preventable death. On the other hand, unnecessary transplantation

carries upto 30%, 1- year mortality, commits the patient to life long immunosuppressants and is expensive.

The options in Liver Transplantation include deceased donor, either whole liver or split liver and Living donor. Auxiliary transplant placed orthotopically after partial hepatectomy in the recipient, is another fascinating alternative available.

Live donors account for more than 90% of transplants in India, compared with just 5% in the Western world. In Kerala, live-donor liver transplantation remains the predominant option for patients with acute liver failure, with the survival rate at Amrita Institute being more than 75% with excellent quality of life postoperatively.

AIMS Facts & Figures...

No. of beds	:	1300
No. of OP patients	:	8, 29, 654
No. of IP patients	:	48, 126
No. of heart surgeries	:	1492
No. of liver transplants	:	520 (cumulative)
No. of kidney transplants	:	572 (cumulative)
No. of patients reached through Medical Camps	:	65, 626

State-of-the-art Autopsy Block @ Dept of Forensic Medicine & Toxicology

Kerala's most advanced autopsy block with world class facilities such as state-of-the-art autopsy theatre, viewing gallery, cold storage facility as well as separate rooms for the police inquest, relatives of the deceased, and visitors was inaugurated at AIMS on 28th August 2016. 24-hour CCTV surveillance and recording facility are additional features. Dr. Arul R.B. Krishna I.P.S., Deputy Commissioner of Police (Law & Order and Traffic) Kochi City, a qualified physician himself, inaugurated the new facility.

Dr. Anu Sasidharan.



Awards & Accolades!!



Dr. Sanjeev K. Singh, Medical Superintendent, AIMS received *British Medical Journal award* for the Infectious Disease Initiative, presented by Minister of State for Health, Ms Anupriya Patel, Govt. of India.

Dr. Karthik Are, 2nd Year MS (Gen. Surgery) won



"Best Research Paper Award" at 59th Annual IMA State Conference- 2016, held on 13th November 2016.

Dr. Arun Kumar MD (Em. Med.) II year - 3^d Prize. **Dr. Muthiah. S.**, DM (Cardio) II year - 2nd prize.

Indian Academy of Echocardiography, 2016 meeting, Madurai; 21st-23rd, Oct.



Drs. Arunkumar, Karthik Are, Muthiah Subramanyam

Dept of Cardiology participated:

Dr Hisham Ahamed MD DM (First Prize - Best Case Presentation in the Clinical Cases Category).

Ms Aishwarya. R - Cardiac Sonologist (First Prize - Best Case Presentation in the Cardiac Sonographer category).



Annual State Conference of ENT, KENTCON, was held on the 1st and 2nd of Oct. 2016, Thiruvalla.

Dr. Renuka Balu won the M. A. Gopalakrishnan Gold Medal prize for Best Video presentation.



Dr. Tinku Joseph, final year DM resident, won Second prize in scientific paper presentation @ South Indian Pulmonary Medicine Conference (APPCM - South Zone chapter).

Dr Shilpa Menon - DM Resident
- Third Prize. Case presented - "A case of Sub-mitral aneurysm".

Dr Chirag Reddy - DM Resident (Received special mention for presenting in the Natesa Pandian Award session for interesting cases).

12th Indo-US World Congress of Emergency Medicine, Bengaluru from Oct. 20-23, 2016, organized by St. John's Medical College:

Dr. Arunkumar. K, Final year resident, (Em. Med) was awarded the

'Best Research Poster'.

Dr. Anu Susan George, Final year DM (Med. Oncology)- awarded **First prize** for poster presentation @ "Myeloma- State of the Art 2016" Conference, PGIMER, Chandigarh (30th Sep to 1st Oct '16).

7th ALL KERALA NEURO QUIZ 2016, 2nd Oct 2016 @ Jubilee Mission Medical College, Thrissur. FIRST prize won by 2012 MBBS Students:

Ms. Maya Suresh Kumar & Mr. Jishnu Narayanan Nair.

Mr. Aaditya R (2012 batch MBBS) & **Mr. Vishnu Karthik** (2013 batch MBBS) have secured **first position** in Dr. K K Rahulan Memorial All Kerala Inter Medical Quiz Competition- 2016 held at Kozhikode Government Medical College on 20th Oct. 2016.



Scholarship from ICMR !



Following MBBS students have received short term scholarship by Indian Council of Medical Research, New Delhi under the guidance of our faculty members.

S. No	Students	Batch	Guides
1.	Ms. Arya Nair S	2012 MBBS	Dr. Anil Radhakrishnan, Assistant Professor, Ophthalmology
2.	Ms. Cinzia Sreelakshmi Keechilot	2012 MBBS	Dr. Veena Shenoy, Assistant Professor, Pathology
3.	Ms. Laghima V. N	2013 MBBS	Dr. Sobha George, Assistant Professor, Community Medicine
4.	Ms. Maya Suresh Kumar	2012 MBBS	Dr. K Pavithran, Professor & HOD, Medical Oncology
5.	Ms. Vyshnavi Upendran	2013 MBBS	Dr. Georgie Mathew, Professor, Urology

Fellowships to attend work-shop Abroad!



Dept of Oncology received fellowships to attend the Australia and Asia-Pacific Clinical Oncology Research Development Workshop (ACORD) held in Australia.

Dr. Anupama Rajanbabu, Professor in Gynaec-Oncology &

Dr. Aswin George Abraham, resident in Radiation Oncology.

FICCI Award for AIMS in 2 categories !



1. Patient Safety: Ensuring patient Safety to all patients through an effective Antibiotic Stewardship Program.

2. Innovation in Medical Technology: In recognition of developing a Center for Innovation & Technology Development for 3D-Printing and virtual image reconstruction in Pediatric Heart Disease.

Congrats to our team lead by Dr. Sanjeev K. Singh and Dr. Mahesh respectively !

National ranking by TIMES Group:

AIMS bagged 10th rank for



BEST Ophthalmic Services and 13th rank for Dermatology Service. This was based on country wide survey over 6 weeks.

Best Performance Award in conducting Clinical Trial:



Awarded to **Dr. Harish Kumar** (Endocrinology dept) during National Investigator's meet @ Bangalore, 24th Sep 2016. **Mr. Manoj Raveendran & Ms. Varsha** received best performance awards in Protocol Compliance & Data Quality categories. Congrats!

Award for Outstanding contribution to advances in Clinical Biochemistry received by **Dr. D. M. Vasudevan**, Emeritus Prof. & Head, PG-Programs & Research-AIMS during 43rd ACBICON, Mangalore, 13-15 Dec '16. Hearty congrats to our Mentor-Teacher !

BOOK POST

To _____

IF UNDELIVERED, PLEASE RETURN TO

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