



Today in History

JOHN CHARNLEY
(29th AUGUST 1911 - 5th AUGUST 1982)



John Charnley, was a British orthopaedic surgeon. He pioneered the hip replacement operation, and created the "Wrightington centre for hip surgery". He also demonstrated arthrodesis of joints. He wrote textbook on conservative fracture treatment which was first published in 1950.

Early life
John Charnley was born in Bury, in Lancashire. His father, Arthur Walker was a chemist and his mother, Lily is nurse. He also had a sister, Mary. John went to Bury Grammar School in 1919, in 1929 he gained admission to the Medical School the Victoria University of Manchester, from where he graduated with a Bachelor of Medicine , Bachelor of Surgery in 1935. Charnley became a passionate skier. In 1957, during his annual skiing holiday in Zurs, he met Jill Heaver (1930–2016). Despite a twenty year difference, she was 26, he was 46, they married a few months later, on 15 June. The couple had two children, Tristram & Henrietta.

First surgery and war service
In 1935, Charnley was appointed a House Surgeon at the Central Branch of Manchester Royal Infirmary. He achieved the status of Fellow of the Royal College of Surgeons in 1936. He worked Resident Surgical Officer at Salford Royal Hospital in 1937. Demonstrator in Physiology at King's College London in 1938. During World War II, He joined the troops as a volunteer in the Royal Army Medical Corps in 1940. He ended it in 1944, when he joined the orthopaedics staff at Shaftesbury Hospital. He was resident in Agnes Hunt hospital for 6 months in 1946, during which he developed his interest in bone grafting. He persuaded a junior colleague to test a surgical procedure on his leg, which resulted in a wound infection that forced him to bed for some weeks.

Wrightington and hip implant
Charnley disagreed with hydrodynamic theory & his studies led to the development of the Low Friction Arthroplasty Concept. This discovery caused him to begin looking for a slippery substance for the socket of a total hip replacement. Polytetrafluoroethylene seemed to meet this requirement. At about a year after the first operations (about 1960) it became clear that PTFE was not suitable as it showed signs of wear and most importantly reaction with soft tissues. A salesman approached him offering to sell him High Molecular Weight Polyethylene (HMWP). After some tests he implanted it for the first time in 1962, convincing that HMWP was a safe material. He collaborated very closely with the firm of Chas. F. Thackray Ltd in Leeds whom he had first asked to make instruments for him in 1947. Charnley was convinced that the best way to fix the prosthesis into the femur was to use bone cement that acted as a grout rather than as a glue. The cement was produced by CMW Laboratories Limited and was called CMW bone cement. Charnley also retrieved the artificial joints from patients who died some years after surgery in order to study wear of the materials and the tissue changes and thus enable improvements in the procedure.

Against infection after Hip Replacement
His first attempt was introducing antibiotic, gentamicin into the bone cement. To improve his system, F. H. Howorth, adapted Charnley's enclosure to incorporate a diffusion system that allowed larger flow filtered air. Another source of contamination was through the surgeon's gown so he developed a full-body gown that incorporated an exhaust system. This came into use from 1970s.

Awards
Gairdner Foundation International Award (1973)
Lasker-DeBakey Clinical Medical Research Award (1974)
Lister Medal (1975), Albert Medal (1978), Fellow of the Royal Society.

LET'S CELEBRATE
Department celebrated Birthdays of following faculty and postgraduates:

Dr Sudheer K A M Shandilya, HOD and Professor on 11th July
Dr P Vijay Shankar, Assistant Professor on 20th July 2019
Dr Yoseph, Post graduate on 7th June 2019
Dr G Vamsi kiran, Post graduate on 3rd July 2019
Dr Y Vineeth, Post graduate on 4th July 2019
Dr D Chandrashekar, Post graduate on 15th July 2019

Ready for a Quiz ?

? Diagnosis

Answer to the quiz in last issue:
Osteopetrosis (bone in bone disease)



Department of Orthopaedic Surgery



There are no secrets to success

It is the result of preparation, hard work and learning from failures

EDITORIAL BOARD

EDITOR IN CHIEF :
Dr Sudhir K A M Shandilya

EDITORS:
Dr. R.M. Mallikarjuna Reddy
Dr. I Suresh

CO-EDITORS:
Dr. Vijaya Shankar
Dr. Bharath
Dr. Ravindra Babu
Dr. K Aditya
Dr. Rohith
Dr. Shrayya Teja
Dr. Tajuddin Shaik
Dr. Vasanth Kumar

MEMBERS:
Dr. Avinash
Dr. Sasikanth
Dr. Pavan
Dr. Rahul Reddy
Dr. Subbarayan
Dr. Yesoph
Dr. Surendra
Dr. Naresh
Dr. Chandrashekar
Dr. Koushik
Dr. Praveen
Dr. Thirumalesh
Dr. Rajan
Dr. Meghana
Dr. Lavanya

KNOW YOUR FACULTY

Dr. Bharath Thati
MS Orthopaedics
Fellow in Arthroscopy, Sports Medicine & shoulder surgery
Assistant Professor, ASRAM Medical College, Eluru

EDITOR'S MESSAGE

OLD CHINESE Wisdom: A Moral Story

A farmer in ancient China had a neighbour who was a hunter, and who owned ferocious and poorly trained hunting dogs. They jumped over the fence frequently and chased the farmer's lambs. The farmer asked his neighbour to keep his dogs in check, but this fell on deaf ears. One day the dogs again jumped the fence, attacked and severely injured several of the lambs. The farmer had had enough, and went to town to consult a judge who listened carefully to the story and said: I could punish the hunter and instruct him to keep his dogs chained or lock them up. But you would lose a friend and gain an enemy. Which would you rather have, friend or foe for a neighbour? "The farmer replied that he preferred a friend. "Alright, I will offer you a solution that keeps your lambs safe, and which will keep your a neighbour a friend.. " Having heard the judge's solution, the farmer agreed. Once at home, the farmer immediately put the judge's suggestions to the test. He took three of his best lambs and presented them to his neighbour's three small sons, who were beside themselves with joy and began to play with them. To protect his son's newly acquired playthings, the hunter built a strong kennel for his dog. Since then, the dogs never again bothered the farmer's lambs. Out of gratitude for the farmer's generosity toward his sons, the hunter often shared the game he had hunted with the farmer. The farmer reciprocated by sending the hunter the cheese he had made. Within a short time the neighbours became good friends. A saying in Old China went something like this, "One can win over and influence people the best with gestures of kindness and compassion." A similar Western saying: "One catches more flies with honey than with vinegar." Let us make an effort to make a pact that we will be polite when we speak and not make rude and sarcastic remarks at every opportunity we get, especially with our families, friends and colleagues. Positive thinking Positive Life

3RD ISSUE RELEASE

Ortho messenger third issue of volume two Ortho was released on 5/6/2019 at the hands of Dr A V Rao, in gracious presence of Dr Lokanadham and Dr Vittal Sir.on 15/6/2019.



FRESHERS PARTY

1st year post graduate students who joined in the year 2019 had arranged a buffet party which was celebrated at Hotel Ambika on 28th June 2019.



ILIZAROV WORKSHOP

Attended Workshop on Deformity correction by Ilizarov method. Very useful and interesting. Headed by Dr. Vasudevan from Pallakad, Kerala. We thoroughly enjoyed.



DOCTORS DAY

Doctors day was celebrated in the department on July 1st



APPRECIATION AWARD TO HOD

Dr Sudhir K.A.M Shandilya Professor and HOD Orthopaedics received special appreciation prize for his presentation on Intermittent Fasting in CAP Meeting.



ORTHO ANAESTHESIA TEACHING PROGRAMME

Horizontal teaching program for Ortho and Anaesthesia Postgraduates. Guest lecture by Dr Harish Gautam Senior Anaesthetist, given on "Preparation of the patient for Anaesthesia and Surgery" on Friday 26th July 2019. He explained in detail about various aspects of pre-anaesthetic check up.



SURGERIES OF THE MONTH

TENDON AND NERVE REPAIR:

by Dr. Suresh ininki and team

A 42 years male came with complaint of Sickle injury to his right wrist on volar aspect followed by which he was not able to extend his thumb and there is tingling and numbness of thumb, index and middle finger. He came to ASRAM, where he was clinically evaluated and diagnosed to have Flexor pollicis longus and median nerve injury, so he underwent Flexor pollicis and median nerve repair.



TOTAL HIP REPLACEMENT:

by Dr. R.M.Mallikarjuna reddy and team

A 37 Years old female came with complaint of Right hip pain since 2 years and was unable to walk and had difficulty in squatting and sitting cross legged so she came to ASRAM hospital, where she was diagnosed to have secondary osteoarthritis of right hip for which, she underwent Total hip replacement.



DEFORMITY CORRECTION

by Dr. R. M. Mallikarjuna reddy, Dr Sk Tajuddin and team

A 12 years old male with deformity of left leg came to ASRAM hospital, where he was diagnosed to have genu valgum of left knee since past 2 years when he had a pathological fracture of supracondylar femur, which was treated conservatively in outside hospital which had malunited resulting in genu valgum, so deformity correction was done with supracondylar femoral osteotomy.



OSTEOCHONDROMA EXCISION

by Dr Rohith, Dr Shravya and team

A 10 years old child with swelling at right scapula at the back which is painless and gradually progressive in size since 4 years had come to asram hospital where he was diagnosed to have osteochondroma of scapula so he underwent surgical excision.

