

## **Dr John Walshe 24.04.1920 – 14.10.2022**

Dr John Walshe was internationally known for his outstanding contributions to the understanding and treatment of Wilson's Disease. His inspirational work, starting in the 1950s, identified oral drugs which in most patients are effective in reversing the liver and brain damage. Previously, only an unpleasant drug given by injection had been used.

John, whose father was an eminent neurologist, applied to study medicine at Trinity Hall, Cambridge University in 1939. After preclinical studies, he moved to University College Hospital in London for his clinical training, qualifying as a doctor in 1945. After two years with the Army Medical Corps in the Middle East, he returned to UCH in 1948 as a registrar.

John was awarded a research grant from the Royal Society and worked with Dr Charles Dent on various aspects of liver failure. Charles Dent was a revered Metabolic Specialist whom John described later as having transformed medicine from an art into a science. John identified a substance called penicillamine in the urine of a patient with liver disease on penicillin. That could have been that..

John was then awarded a Fulbright Fellowship to do a year of research in the USA in 1955, and chose the Liver Unit at the Boston City Hospital. By entire luck, an event happened there which sparked his lifelong interest, specialisation and expertise in Wilson's Disease. The liver team met a neurology Professor in the corridor who asked them, 'Do you have any suggestion to help a patient with Wilson's disease who is not doing well?' John remembered the penicillamine found in urine in the patient at UCH, somehow visualized its chemical structure, and thought that it should bind copper and take it into urine. He said, 'What about using penicillamine?' Despite this baffling his colleagues, they obtained some penicillamine. John took doses himself and had no ill effects. When it was given to the patient, there was a surge of copper coming out in the urine. His prediction proved correct.

John returned to UCH, and studied four more patients with the same findings (published in 1956), and this is how penicillamine became the oral drug treatment for Wilson's disease. John moved to a clinical/academic post in Cambridge and from then on specialised in Wilson's Disease.

In the 1960s, as some patients were intolerant to penicillamine, he asked Dr Hal Dixon, a chemist at Cambridge University, if he had any suggestions of an alternative: he did, and this is how trientine was found and developed. Today penicillamine and trientine remain at the forefront of treatment of Wilson's Disease and have absolutely transformed the outcome of affected patients. In his clinical practice he was the 'go to' doctor for Wilson's, and personally looked after over 300 patients from the UK and around the world. Patients revered him.

John wrote over 150 papers and chapters on Wilson's Disease, the last being in 2019, when he was 99 years old! He received a prestigious DSc from Cambridge University, and an MD from Uppsala, and gave many named lectures. He retired from Cambridge in 1987, aged 67, but was given an Honorary Consultant and Academic title at UCL, so that he could continue his specialist Wilson's clinics there, with Dr Godfrey Gillett. After he retired completely in 2000, aged 80, the clinics continued with Dr Gillett, and do so up to the present day. John enjoyed retirement at Hemingford Grey, Cambridgeshire, particularly gardening and spending time with his children, grandchildren and great grandchildren.

So, the world owes a great debt of gratitude to Dr John Walshe for his discovery, years of 'perspiration' (his word for hard work), and his devotion to patients with Wilson's Disease, which saved and benefitted the lives of so many with this rare and often challenging condition.

*Edited from the Eulogy by Dr James S Dooley given at the Sacred Heart Church, St Ives on 03.11.22.*