The History of Radiology' SESSION UKIO 2022

by Dr Arpan K Banerjee Chair ISHRAD (International Society for the History of Radiology), Trustee and Past Chair British Society for the History of Radiology

Following the Covid pandemic in 2020 and 2021 when the history sessions of the UKIO had to be held virtually it was a delight this year to have an annual radiology imaging and oncology congress in person and this was held in the ACC, Liverpool. The radiology history session organised by the BSHR was held on the Monday 4 July and consisted of four talks with the session chaired by Elizabeth Beckman.

The first talk was 'A history of PET and PET / CT' delivered by Dr Arpan K Banerjee. In this talk the contributions of Paul Dirac (the Cambridge mathematician who predicted the existence of the positron) and Carl Anderson were described in addition to Ernest Lawrence and his work on the cyclotron. The early pioneers in America and their contributions to the development of this new technique were presented. In addition the British developments involving the introduction of clinical PET services at St Thomas's, Hammersmith and Mount Vernon hospitals reminded us of the early visionary enthusiasts who championed this relatively new imaging modality.

The next talk was given by Dr Edwin Aird a retired physicist and was titled 'LH Gray (physicist and radiobiologist) his life, laboratory and legacy.' Gray was born in 1905 and studied physics and maths at Cambridge. He took a job at Mount Vernon hospital on the recommendation of Chadwick (discoverer of the neutron) where he had ample time to pursue his research interests which included the interaction of radiation with matter. In 1946 he moved to the Hammersmith hospital which at the time was conducting a lot o research on neutron therapy. Sadly he fell out with the director and in 1953 had to move to Mount Vernon hospital where he started his own laboratory. Sadly he died young in 1965. Today he is of course remembered for the unit of absorbed radiation dose which is named after him. He also did much pioneering work on hypoxia and tumours.

The next talk was delivered by Dr Michael Jackson the current chair of the BSHR whose presentation was titled 'Exploring the equilateral Why are medical images rectangular?' Examples of early art and pinhole photography served to illustrate the argument. We were taken through examples of art where this is indeed the case and of course medical images which have been presented in a rectangular form. Quotes from John Berger the art critic on perspective serve to remind us that perspective is in the eye of the beholder who can of course be in only one place at a time whereas it was thought that the universe was arranged for God who was of course omnipresent hence the contradictions in the perception of perspective. The presentation was illustrated with rectangular écorche anatomical drawings as well as examples of radiological images including CT scans and radiographs. Comparisons were also made with cinematic projections which ranged from early films using 4/3 ratios to later widescreen presentations in CinemaScope and VistaVision. Today we are used to rectangular screens on high definition television sets,

laptops, and smart telephones. Finally even data presentations and PowerPoint presentation slides have become rectangular!

The final presentation was delivered by Prof Adrian Thomas titled 'Neuroradiology and philology as presented in the Doctor is sick of 1960 by Anthony Burgess'. Burgess is probably best remembered today for his dystopian society novel 'A Clockwork Orange' made into a controversial film by Stanley Kubrick in 1971. The Doctor is Sick is a semi autobiographical novel and the central character undergoes neuroradiological investigation for a possible brain tumour following a collapse. The neurology doctor in the book Dr Railton is based on Sir Roger Bannister (neurologist famous for running the mile in under four minutes in 1954). The author Anthony Burgess provides an interesting description of the relationship of the patient and the images obtained of the brain by angiography made more complex as the central character is a linguist who describes his experience brilliantly in the written form. The relationships between the themes of imaging and reality and their perception by patients remain as relevant today as in 1960 when the book was written.

The British Society for the History of Radiology stand organised by Adrian Thomas generated a lot of interest and will hopefully result in new members joining the society.