

## HISTORY OF NEUROLOGY

### The history of child neurology in Hong Kong

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Paediatrics neurology in Hong Kong began in the *Department of Paediatrics, University of Hong Kong*, in the 1980's when Dr WF Lui (senior lecturer) started a weekly neurology clinic at the Sai Ying Pun Outpatient Clinic for the follow-up of children discharged from Queen Mary Hospital (QMH). Meanwhile developmental assessment clinics were held at QMH by Dr F Baber (lecturer) and CW Chan (senior medical officer). In 1982, Professor CY Yeung and Dr WF Lui began the planning of a developmental assessment programme at the Duchess of Kent Children's Hospital (DKCH) with support from the Society for the Relief of Disabled Children. Dr F Barber, Dr CW Chan and the late Professor JH Hutchinson together organised a project on developmental screening for Chinese children from birth to five years old, which has been adopted as a developmental screening for all children in Maternal and Child Health Clinic of the Department of Health.

Dr CW Chan, Dr F Baber and Dr WF Lui left the Department in 1981, 1984 and 1985 respectively. In 1985, Dr V Wong (lecturer) returned from her training at Guy's Hospital, London and was given the task of re-organising both the child neurology and developmental paediatrics programmes on her own. Child neurology, as different from adult neurology, has a developmental basis and neither child neurology nor developmental paediatrics can survive without the basic skills of the other. The restructuring of the child assessment programme within DKCH was completed in 1986 and the Child Assessment Centre was inaugurated in November, 1987.

The staff mix of Child Assessment Centre consists of one each of senior medical officers, clinical psychologist, speech therapist, medical social worker, physiotherapist, occupational therapist two medical officers, and three nurses. In 1994, a Child Development Centre was established in DKCH with recruitment of an extra team of allied health team members (one clinical psychologist, one speech therapist, one

occupational therapist and one physiotherapist). Since then, DKCH has been the main referral centre in Hong Kong for children with various neurological and developmental problems.

Paediatric neurophysiology laboratories for children were set up by Dr V Wong in both QMH (1985) and DKCH (1987), and together they offer a full range of electrodiagnostic procedures (EEG, ambulatory EEG, video EEG, evoked potentials, electromyography and sleep studies).

The Department of Paediatrics of the University of Hong Kong has been the main training ground for child neurology and developmental paediatrics for both undergraduates and postgraduates. It provides acute and subacute clinical services to children with various neurodevelopmental disorders within the main campus at QMH and in the affiliated hospitals comprising DKCH, Grantham Hospital (Paediatric Cardiac Centre) and Tsan Yuk Hospital (Neonatal Centre). A professorial post was established in 1996 for the combined programme of Developmental Paediatrics and Child Neurology to become a *Division of Neurodevelopmental Paediatrics* within the Department of Paediatrics. Professor V Wong was appointed as the first professor.

DKCH is a community-based centre in which services provided by bodies such as the Education Department, Social Welfare Department and various voluntary organisations are integrated. The programme it offers is comprehensive, including evaluation, management, training and rehabilitation.

The programme in DKCH is therefore unique in that it links an acute neurological service with a chronic tertiary neurorehabilitation facility. This networking provides not only a fully integrated clinical service for patients but also a comprehensive training environment for our paediatricians, nurses and allied health workers. In 1988, the Hospital Authority endorsed the establishment of a *Child Habilitation Institute* within DKCH to conglomerate the

neurorehabilitation programme with a multidisciplinary, interdisciplinary and transdisciplinary approach to children with neurodevelopmental disabilities. The establishment of Child Habilitation Institute brings the vision and mission of the Child Neurology team of Hong Kong University right to the next millennium. This is an extra team of staff (one each of consultant, medical officer, clinical psychologist, speech therapist, audiologist, medical social worker and eight nurses) to co-ordinate the service and research of the Institute.

In the late 1980's, child neurology services began to develop in other hospitals as well; in Queen Elizabeth Hospital under Dr L Chiu (1984), Princess Margaret Hospital under Dr KY Chan (1987) and Prince of Wales Hospital under B Koo (1988). By the 1990's, these services have extended to the Tuen Mun Hospital under Dr L Kwong (1994), Pamela Youde Nethersole Eastern Hospital under KT Liu (1995), and a "Severe Mental Handicap Unit" in Caritas Medical Centre under Dr P Tse (1996). Thus, presently nearly all the major hospitals in Hong Kong have a child neurology service.

Dr L Ko started the child assessment centres in the community in 1977. The first one began operation in Arran Street, and at present there are five child assessment centres that receive referrals from Maternity & Child Health Clinics and general practitioners under Department of Health. Dr R Mak has been in charge of these five child assessment centres since 1989 and Professor V Wong has been in charge of Duchess of Kent Children Assessment Centre since 1985.

From a global perspective, child neurology as a discipline has flourished since the 1960's with the initial wave starting in the United States of America. In Asia, Japan has been a leading force. However, comprehensive programmes linking child neurology, developmental paediatrics and paediatric neurorehabilitation are still seldom found elsewhere in the world due to the concept of subspecialisation within paediatrics.

A combined society for Child Neurology and Developmental Paediatrics was first proposed by Dr V Wong and Dr KY Chan in 1992. The *Hong Kong Society of Child Neurology & Developmental Paediatrics* was subsequently founded in 1994 with 22 members. In Hong Kong, a medical practitioner practices full time in either private or the public sector (University, Hospital Authority or Department of Health) but not both. The Society plays an important

role to cement the link of the child neurologists and developmental paediatricians working in the different sectors.

There has been a close relationship between child neurologists and adult neurologists within Hong Kong. The *Hong Kong Neurological Society* was inaugurated in 1972 by Dr CY Huang. Professor V Wong is the first child neurologist being elected as President (for the term 1996-98). Currently there are 35 full members and the Society is a member of the World Federation of Neurology. The *Hong Kong Society of Neuroscience* which serves the wider neuroscience community was formed in 1979, founded by members of the University of Hong Kong, Drs SF Pang & YS Chan from the Department of Physiology and Dr KF So from the Department of Anatomy. All three are now professors.

It is most regrettable that despite having a population of 6 millions, Hong Kong has yet to see an institute of neurology which brings together all the neurological subspecialties under one roof. These subspecialties would include adult neurology, neurosurgery, paediatric neurology, developmental paediatrics, neurophysiology, neuropathology, neuro-immunology, neuroradiology, neuropsychology, neurorehabilitation and neuroscience. The setting up of such an institute within the University of Hong Kong was first proposed by Dr CY Huang and Professor J Hwang in 1987, and subsequently by Dr YL Yu and Professor Lieh-Mak in 1991. Later, this idea evolved into the *Neuroscience Research Centre*, which was successfully inaugurated in 1994 under the leadership of Professor KF So. The scope of this centre is at present limited to research, and it is at present a virtual centre only. Currently it has over 80 fellows and students. The Neuroscience Research Centre has formal collaboration with University of British Columbia and key neuroscience centres in China. There had been a research funding of more than \$50 million and 450 publications in the past five years.

Some of Hong Kong's neuroscientists and neurologists are highly regarded internationally. If the dream of fully-equipped institute of neurology could become a reality here, Hong Kong's neurology, including its paediatric neurology, would be among the best in the world in a decade or two.