THE HISTORY OF HAND SURGERY IN HONG KONG

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Since you are expecting me to be a storyteller, I have decided not to use any slides for this talk.

I am sure hand surgery had been done thousands of years ago in Hong Kong. The pre-historic findings in Po Toi Island shows hieroglyphics of the hand and the knife. The first graduate of the Hong Kong Medical School, Dr. Sun Yat Sen, who was also the father of modern China, must have drained a few hand abscesses a hundred years ago.

The first professor of orthopaedic surgery in Hong Kong, Arthur Hodgson, had a difficult time in deciding whether to develop spinal surgery or hand surgery as both T. B. spine and hand conditions were prevalent in the 50s and 60s. Although he eventually made fame in spinal surgery, he was able to invite Dr. Joseph Boyes to come to Hong Kong for a whole year in the early 60s, when leprosy, poliomyelitis, tuberculosis, and industrial injuries really kept Joe busy. It was also at that time that Paul Brand and Grace Warren were involved in the leprosorium in Hei Ling Chau.

In 1965, Dr. Tsao Yen Shui was sent to Los Angeles for one year, studying hand surgery under Dr. Boyes and rehabilitation at Ranchos Los Amigos. Unfortunately, he left the University one year later because of health reasons.

In the early 70s, emergency hand surgeries were mostly handled by interns and sometimes by the most junior trainee on duty. Secondary procedures were dealt with by the more senior residents. P.C. and myself have often agonized over the lamentable results and in 1972, when P.C. was sent to Britain for training in plastic surgery, hand surgery became one major component of his attachments. When he returned 2.5 years later, he was posted to a general surgery unit where he started his hand surgery as a part-time job at Kwong Wah Hospital. The first successful replantation of a chopped off hand at wrist level in an 82-year lady was performed there in 1975. As soon as he became a consultant at Princess Margaret Hospital, hand surgery became his major field of development. I was sent abroad in 1976 and 1977 to study hand surgery in Britain and in U.S.A. I am particularly indebted to Jack Tupper who not only gave me private tutorials everyday, but told me that "there was no mystery in microsurgery, just do it!"

Upon my return therefore, after practising for two weeks in the laboratory, I was able to replant an amputated thumb successfully using microsurgical techniques.

Those were the days when we had to get up almost every night to make sure that hand injuries of more than 10% disability would be dealt with by us personally. Replantation would be done once or twice every week. P.C. and myself had struggled for 10-20 hours using very primitive instruments and ENT microscopes. Toe-to-hand transplants, free-flaps, vascularised bones were started one after another. Tendon surgery had gone through the use of silastic rods and grafting to primary repair and rubber band traction. Bone fixation evolved from K-wire, splints to A-O screws and innovative intramedullary pegs. Modern hand surgery was instated in Hong Kong since the late 70's.

Of much greater impact is the improvement in the organisation of our work. Rehabilitation in the form of "Hand Classes" were organised where surgeons, trainees, physiotherapists and occupational therapists will assess a patient together, and patients in groups of 60-70 will be treated together with very beneficial effects to all concerned. Trainees will be rotated through hand surgery during their training, and the microsurgical

laboratory was open to all doctors in Hong Kong for practice. Our occupational therapists also started ingenious splinting procedures and pressure garment techniques for treatment of stiffness and hypertrophic scar, whereas our physiotherapists have become so skillful in treatment of finger tip wounds that even large skin defects can now be left for them to deal with. Their skill in flexor tendon rehabilitation has produced excellent results second only to those of Jimmy Chow. These people are also indispensable in the execution, assessment, and documentation of research activities.

We have always emphasized the importance of the research spirit rather than the activities. This means that each one of us should continue to evaluate and improve on our own work. No wonder therefore, as a clinician, our research activities concentrated mainly on the clinical side. Hong Kong has produced more than 100 articles on almost all aspects of hand surgery. Notably, we have had major contributions in toe-to-hand transfers, innovative finger reconstruction, extensor tendon splintage, atypical mycobacterium infections, forearm intravenous regional anaesthesia, finger fractures, and vascularised bone transfer, just to mention a few.

Basic research in microvascular surgery, biomechanics, tendon healing, bone healing, and nerve regeneration were carried out. I still remember the good old days when P.C. would gulp down a piece of bread with water on a Saturday afternoon doing research at the pharmacology laboratory at HKU, or myself doing animal experiments with Chinese scholars until midnight, followed by snack in Kennedy Town.

Of particular satisfaction were our studies on the social and psychological aspects of hand injuries. My finding disagreed with P.C. (s conclusion, and after suggesting to the Labour Department that briefing of machine safety must be given to each worker, the incidence of hand injuries gradually declined. A further decrease in recent years, of course, is due to the movement of factories to the north across the border into China.

The achievement of Hand Surgery in Hong Kong was recognised both locally, regionally, and internationally. Our surgeons had participated as teachers or guest speakers at instructional courses and national meetings first in Asia, and later in Europe and the New World. Contributions to books and special issues, representation on international hand societies, corresponding memberships to advanced countries, corresponding editorship on renowned journals, all have boosted the image for Hong Kong as one of the centres in Hand Surgery in the world. The inaugural meeting of the Hand section of the Western Pacific Orthopaedic Association was held in Hong Kong in 1983. We have since organised international meetings, annual workshops and offered travelling fellowships to our neighbouring countries and China.

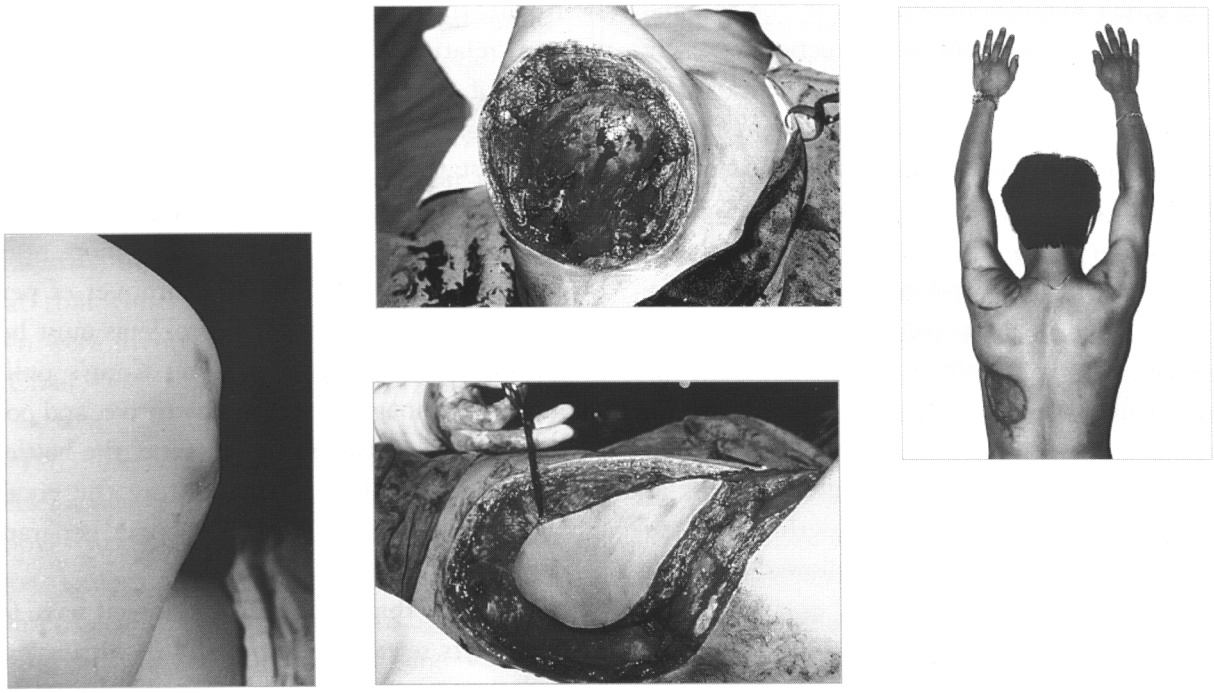
It would be untrue to say that we do not have shortcomings and frustration. The high demand of hand surgery and its long working hours, frequently during anti-social moments, coupled with relatively low financial return has scared off a lot of young doctors. Systematic teaching and training of staff is still lacking. Consultants and senior staff are all overburdened with administrative duties, occupying 50% of the 100 hours working weeks in my case. Much more research can be done if we have less turnover of people. However, the most difficult problems must be the question of 1997 facing Hong Kong's political future. Although economy may thrive, and politics eventually will become democratic, the battle will not be won unless we can restore the good old "Hong Kong Spirit" in our younger generation.

I believe that both P.C. and myself have found our efforts rewarding, especially in witnessing the dedication of younger surgeons doing Hand Surgery. However, both P.C. and myself would have failed if we do not cultivate a critical attitude in your work, a caring sentiment towards the occupational and social aspect of our patient, and a concern of our community beyond medicine. For all knowledge is vain save when there is work, and all work is empty save when there is love. In this respect, I am happy to say that some of you have done better than we have expected. F.K.

Ip, for example, have helped the needy not only during his undergraduate days in India and Bangladesh, but continued to serve on the workers medical support group. Tim So cared not only about development of hand surgery here, but also the spiritual resurrection in China. S.H. Yeung wrote to me from Britain during his training about his frustrations in working in government hospitals, but ended up being the most hard-working of the government consultants. Wu Wing Cheung was in Shanghai on the eve of June 4, 1989 for micro-surgery training. L.K. Hung gave up the chance of being a consultant in Britain just to come back and took over from P.C. And Jack Cheng, Robert Chang, so on, so on .....

With the establishment of the Academy of Medicine in Hong Kong, Hand Surgery will be part of a more structured training for orthopaedic trainees in Hong Kong. With the upgrading of the socio-economic status of this region, especially the upgrading of national and private medical insurance, hand injured patients will receive the due attention they so deserve. With the maturation of hand surgery in the Asian Pacific region, including those in mainland China, there are great opportunities for further co-operation. And with the emergence of the European Hand Community, and perhaps the Asian Pacific region soon to follow, the North Americans may find that such challenges, like world trade and commerce, may present as opportunities to the final benefit of all. I shall leave it here for Professor P.C. Leung to talk on these aspects.

(This speech was delivered by Prof. Chow in the 1993 Workshop of HKSSH)



M/30, clear cell sarcoma at left acromio-claviarlar joint. Wide excision done with functioning latissimus dorsi muscle flat tranfer.