## Masterclasses

M6.3

## Surgical Services at Hong Kong Children's Hospital and Plastic Surgery on Congenital Diseases

16:15 Convention Hall A

Plastic Surgery for the Ears: Common Otoplastic Procedures in Children *Tan T* 

Department of Surgery, Prince of Wales Hospital, Hong Kong

Protruding ears and microtia (underdeveloped pinna) are frequently contributed to social derision, especially among schoolaged children. For these children, otoplasty can be performed resulting in improved self-image and confidence for both patients and their families. In fact, otoplasty is one of the most commonly performed plastic surgical procedures in children.

Non-surgical correction of certain types of congenital ear deformities (such as prominent ears and cryptotia) may be adopted if started early in the form of auricular splinting. Early splintage has been shown to be effective but requires a high level of expertise and compliance.

There are various methods of surgeries for microtia which revolves around the same concept – harvesting rib cartilage for the framework and putting it under the skin at the ear region. As the ears reach about 85% of adult size at four years of age and the chest wall reaches a satisfactory size for rib cartilage harvest at an older age, most would advocate surgery for microtia children between six and 10 years of age, to provide enough rib cartilage to make an adult ear size. This is at present the most common method for surgical reconstruction of the ear.

Although harvesting rib cartilage for auricular reconstruction has been a well-established surgical treatment for many years, there is risk associated including chest wall deformities, an additional scar, etc. Surgeons have been exploring methods to provide improved cosmetic results with less discomfort without the chest wall scar. Dr Reinisch introduced his technique of biocompatible implant Medpor to fabricate the auricular framework, eliminating the need to harvest rib cartilage.

There has been extensive research on bioprinting ear cartilage but no success in using them in humans as of date.