FABRICATION OF AN AURICULAR PROSTHESIS IN A PATIENT WITH CONGENITAL MICROTIA: A CASE REPORT

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ABSTRACT

This is a case report on the fabrication of an auricular prosthesis and review of literature on microtia. A five year old Asian boy presented to the Maxillofacial Prosthetics and Dental Service at the Memorial Sloan-Kettering Cancer Center.

The poster discusses the step by step fabrication of the auricular prosthesis. Initial impressions of both ears were made with irreversible hydrocolloid. Left auricular wax sculpting was completed which was followed by silicone fabrication using MDX4-4210. On the next appointment tinting of the prosthesis was completed. Last appointment involved the delivery of the auricular prosthesis.

REVIEW OF LITERATURE

Microtia is a congenital anomaly, characterized by a small, abnormally shaped auricle (pinna). It is usually accompanied by a narrow, blocked or absent ear canal.1,2 The prevalence ranges from 0.83 to 17.4 per 10,000.1,2 Microtia is more common in males, and right-sided dominance varies from 57 to 67%.3,4 The prevalence of aural atresia or stenosis varies from 55 to 93%.5

Epidemiological studies report that the majority of cases in China are sporadic and usually more common in males. Mothers who have prior miscarriages over 5 times or perinatal virus infection seem to be more likely to have severe microtia infants.6

The pathogenesis of microtia is still unclear. The hereditary factors are the most probable causes since microtia is usually involved in some specific syndromes with chromosomal abnormalities, such as Goldenhar syndrome, Treacher Collins syndrome, trisomy 21 and trisomy 18.7,8 Some maternal conditions are also considered as the risk factors of microtia, including high pregnant age , high parity , perinatal drugs using and low education.1-3

REFERENCES