

The Importance of Orthopedic Treatment in Crouzon Syndrome - Detailed Clinical Description

Liana Lima Pinheiro

J Den Craniofac Res

Introduction:

The modern total hip replacement was pioneered by Oficina de Ortodontia, Brazil Sir John Charnley, skilled in mechanical engineering at Wrightington Hospital, European country within the Nineteen Sixties. He found that joint surfaces may well be replaced by implants cemented to the bone. His style consisted of a stainless-steel one-piece leg bone stem and head and a polythene, cotyloidal part, each of that were mounted to the bone victimisation PMMA (acrylic) bone cement. For over twenty years, the Charnley Low Friction surgical operation and its spinoff styles were the most-used systems within the world. This shaped the idea for all fashionable hip implants.

The Exeter hip replacement system (with a rather totally different stem geometry) was developed at an equivalent time. Since Charnley, there are continuous enhancements within the style and technique of joint replacement (arthroplasty) with several contributors, as well as W. H. Harris, the son of R. I. Harris, whose team at Harvard pioneered uncemented surgical operation techniques with the bone bonding on to the implant. Knee replacements victimisation similar technology were started by McIntosh in rheumatism patients and later by Gunston and Marmor for degenerative joint disease within the Seventies developed by Dr. John Insall in the big apple utilizing a hard and fast bearing system, and by Dr. Frederick Buechel and Dr. archangel Pappas utilizing a mobile bearing system. Arthroplasty is associate degree orthopedical surgery wherever the articular surface of a contractor joint is replaced, remodeled, or realigned by surgical process or another procedure. it's associate degree elective procedure that's done to alleviate pain and restore operate to the joint when injury by inflammatory disease (rheumasurgery) or another variety of trauma. also because the commonplace total knee replacement surgery, the uni-compartmental knee replacement, within which only 1 weight-bearing surface of associate degree unhealthy knee is replaced, may be a common various.

Joint replacements are obtainable for alternative joints on a variable basis, most notably the hip, shoulder, elbow, wrist, ankle, spine, and finger joints. In a study of hospitalizations within the u. s. in 2012, spine and joint procedures were common among all age teams except infants. fusion was one in every of the 5 commonest OR procedures performed in all ages

cluster except infants younger than one year and adults eighty-five years and older. extirpation was common among adults aged 18–84 years. Knee surgery and hip replacement were within the high 5 OR procedures for adults aged forty-five years and older.

Crouzon syndrome is Associate in Nursing chromosome dominant genetic disease called a body structure syndrome. Specifically, this syndrome affects the primary respiratory organ (or pharyngeal) arch, that is that the precursor of the jaw and mandibular bone. Since the respiratory organ arches area unit necessary biological process options during a growing embryo, disturbances in their development produce lasting and widespread effects.

Abstract:

Facial orthopedics is fundamental for the early correction of orofacial and dental deformities in patients with Crouzon syndrome. This syndrome is an autosomal dominant, hereditary disease characterized by craniofacial deformities caused by the premature closure of cranial sutures. It is clinically diagnosed by the reduction of the anterior and posterior cranial bases, exophthalmia, and maxillary hypoplasia. The forehead is high, with a hooked nose, hypertelorism, palpebral ptosis, and asymmetrical orbits. Treatment during the growth phase is essential to achieve stimulation of the upper jaw, providing space for all teeth, and also balancing the mandible. With these, there is a functional restoration of speech, swallowing and mastication that are essential for development, besides providing an aesthetic improvement during adolescence phase. Early treatment minimizes the need of more aggressive surgical procedures. The aim of this lecture is to describe all steps of an orthopedic treatment using removable and fixed appliances in a 10 year old girl with Crouzon syndrome that underwent an orthopedic/orthodontic treatment during her growth phase.

Conclusion:

Finally we concluded that the aim of this lecture is to describe all steps of an orthopedic treatment using removable and fixed appliances in a 10 year old girl with Crouzon syndrome that underwent an orthopedic/orthodontic treatment during her growth phase.