Introduction

Facial nerve palsy (FNP) is a congenital deformity, which dates from birth, or an acquired deformity, which causes complete or partial paralysis of the facial motion. Diseases or injuries affecting the brain, the facial nerve or the muscles of the face can cause facial palsy ***(Williamson, 2005).***

Infections, injuries, or tumors can cause facial nerve disorders, but the most common cause of facial weakness is Bell's palsy ***(Shaw et al ., 2005) .*** The cause of Bell's palsy is unknown . It is suspected that an irritated facial nerve becomes swollen . As the facial nerve passes through a narrow openings in the skull , it is compressed and symptoms result ***(Alexander et al ., 2009) .***

The first step in diagnosis is to determine whether facial weakness is due to a problem in the central nervous system or one in the peripheral nervous system ***(Ramsey et al., 2000) .*** Bell's palsy accounts for 80% of all peripheral facial palsies diagnosed annually and it is known to occur in 20 - 30 people per 100,000 per year ***(Kim et al., 2006) .***

The diagnosis of FNP relies upon the presence of typical symptoms and signs, blood chemical investigations, cerebro-spinal-fluid-investigations, X-ray of the skull and mastoid, cerebral MRI, or nerve conduction studies. Bell' palsy may be diagnosed after exclusion of all secondary causes ***(Peitersen, 2002) .***

A magnetic resonance imaging (MRI) scan of the head is a noninvasive method to create detailed pictures of the brain and surrounding nerve tissues . The most common type of contrast (dye) used is gadolinium, which is very safe and allergic reactions to the substance rarely occur ***(Wilkinson and Paley, 2008) .*** However , because of the magnet, people who have metal of any kind implanted in their bodies should inform their doctors before a scan ***(Saunders et al., 2008) .***

Computed tomography (CT) and magnetic resonance imaging (MRI) are well established imaging modalities to examine the facial nerve as well

as the course of the facial nerve itself . MR has a superior soft-tissue contrast to CT that enables imaging of the facial nerve itself . Therefore the normal facial nerve as well as pathologic changes of the facial nerve is readily visualized from the brain stem to the parotid gland ***(Jager and Reiser, 2001) .***

Enhancement of the distal intrameatal and labyrinthine segments is specific for facial nerve palsy . Contrast-enhanced MR imaging can reveal inflammatory facial nerve lesions and traumatic nerve injury, including clinically silent damage in trauma ***(Kinoshita et al ., 2008).***