faceforward

disorders of the temporomandibular joint

introduction

The temporomandibular joint (TMJ) – which connects the lower jaw (mandible) to the skull – is quite unique in that it's the only joint that's both a hinge (ball and socket) and a sliding joint.

Because of its location in the face, the TMJ is affected by many factors, such as the number, size and shape of the teeth and jaw size and shape, as well as the size and strength of various muscles and ligaments. When people develop problems with their TMJ, it can be due to any or all of these.

problems

Problems with the TMJ can result in pain, clicking in the joint, and reduced opening of the mouth and movement of the jaw, as well as difficulty in chewing. While many TMJ disorders are relatively minor, they can sometimes be very painful and debilitating.

The most common signs and symptoms in those with TMJ problems are:

- pain in the area of the joint;
- clicking, popping or crackling sounds in the joint;
- a habit of clenching or grinding the jaws;
- sore jaw muscles on awakening;
- difficulty in fully opening the mouth;
- frequent headaches or neck aches, and
- locking of the joint.

525 STIRLING HIGHWAY COTTESLOE WA 6011
T: 08 9385 5544 F: 08 9385 5577 E: info@faceforward.com.au W: www.faceforward.com.au

Most TMJ problems are related in some way to trauma, systemic disease (a disease of the nervous system) or developmental problems in the jaw.

Trauma can be an acute injury (macro-trauma), such as a fall, car accident or blow to the jaw, or prolonged minor stress to the joints (micro-trauma) caused by clenching or grinding the teeth. The latter frequently leads to displacement of the disc of cartilage that cushions the ball and socket of the joint, resulting in clicking and pain.

Diseases such as osteoarthritis, rheumatoid arthritis and lupus can also affect the TMJ, causing destruction of the cartilage, alteration of the bone and damage to the disc within the joint.

If there is **abnormal development** of the jaw, this alters the mechanics of the joint and contributes to micro-trauma damage. In such cases, correction of the underlying jaw problem is usually part of the overall treatment plan.

In some people, facial pain occurs as a result of spasms in the powerful muscles of chewing, as well as those in the head and neck. Such spasms can also cause limited mouth opening, headaches and neck pain, even when the joints are normal. This is known as myofascial pain.

non-surgical treatments

If you have any of the symptoms outlined above, a careful history and examination is required to determine the exact nature of the problem. Only then can treatment options be discussed. Usually, X-rays, including an MRI, are used to gain more diagnostic information. Many people can be helped with very simple measures, such as resting the jaw, moist heat, ice, a soft diet and anti-inflammatory medications.

Some people with TMJ problems benefit greatly from wearing a splint (made by their dentist) at night. The splint takes any stress off of the joint and facilitates healing.

Although not registered for such use, Botulinum toxin is sometimes injected into specific parts of the facial muscles to reduce spasms and associated pain. This treatment has proved effective in children with cerebral palsy; the Botulinum toxin is injected into specific muscles to reduce spasm and allow more normal movement.

Other treatment modalities for TMJ problems include physiotherapy and steroid injections into the joint.

surgical treatments

Surgery is generally reserved for severe TMJ cases that have not responded to more conservative treatment. Two main types of surgery are employed – arthroscopic and open-joint.

In **arthroscopic surgery**, a tiny camera (an arthroscope) is inserted into the TMJ. Less invasive than the alternative, this is generally a day-surgery procedure. If arthroscopic surgery is not appropriate or has failed to help in the past, **open-joint surgery** may be performed to correct the problem. This type of surgery, which is much more complicated, usually requires a longer stay in hospital. Generally, post-surgical care includes physiotherapy, appropriate medications and the wearing of a splint until all problems have resolved.