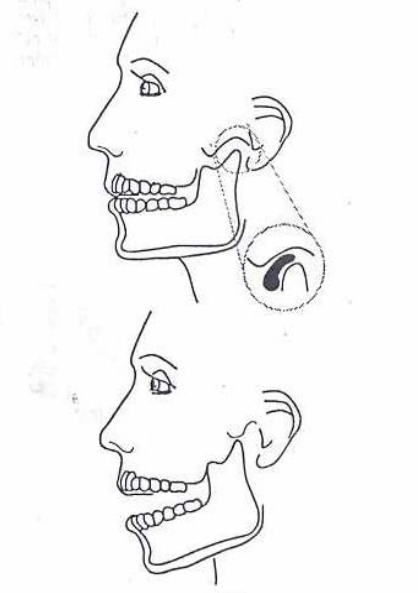
The Troublesome Jaw Joint

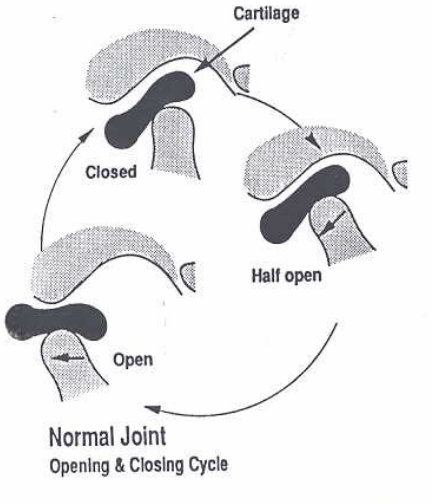


The jaw joints are small but they have a very complex action. They must resist heavy biting forces and they must allow you to open and close your jaw, protrude it and shift it from side to side.

Joint Design

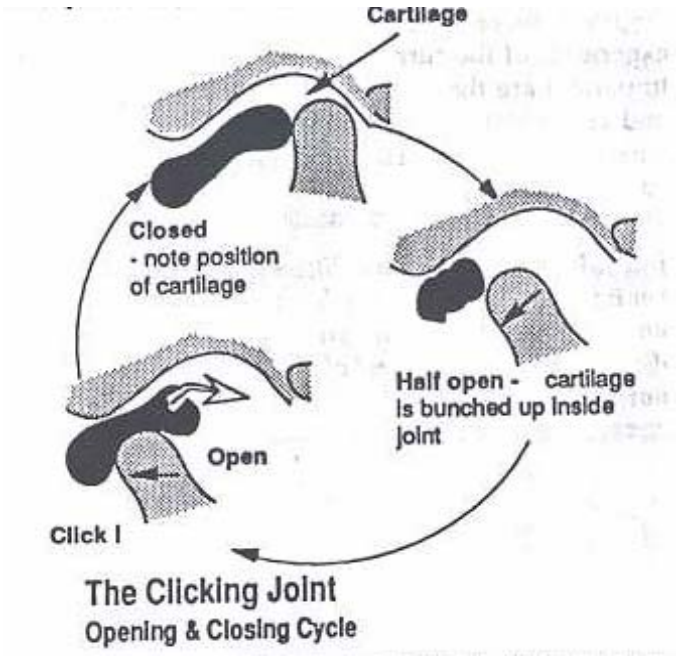
In order that you can perform these complex movements, the jaw must be very loose. In addition there is a sheet of cartilage inside each joint acting as a cushioning mechanism between the two bone surfaces. The opening and closing action is not just a simple hinge movement but involves a gliding action by the lower jaw.

Normal Joint Opening & Closing Cycle



Clicking

Sometimes a joint will click during opening or closing. This is because the cartilage inside the joint has lost its proper gliding action.
Often the clicking will be painless but sometimes it is accompanied by pain and local tenderness.



Locking

After a period of time a clicking joint may begin to lock. The cartilage is failing to click back into position as the jaw opens. At first it may be possible to free the locked joint by massaging or pressing it, or perhaps by a wiggling action of the jaw. Locking usually lasts a few seconds only but it may become more frequent or prolonged. In a few cases permanently restricted joint action may develop.

Thus the Jaw Joint Dysfunction Syndrome is characterized by, clicking, locking and sometimes pain.

Why me?

In most cases there is no obvious reason why you should have developed this condition. Sometimes an uncomfortable clicking joint will develop after a specific incident such as an injury or a recent jaw operation. Sometimes it is associated with an abnormal bite or a tooth-grinding and clenching habit. It is commoner in those of us with extra mobile joints (hypermobility).

Management

Jaw joint dysfunction is common. It may be managed by your family dentist or you may be referred to an oral and maxillo-facial surgeon.

Patient Information

Your First Visit

Your surgeon will take a careful history and examine your jaw joints in action. You may be asked about medical problems that could interfere with surgery or anaesthesia.

X-Rays

X-rays showing the entire jaw are necessary. Unfortunately plain x-rays do not show soft tissues such as the joint cartilage, and are of limited value in telling the surgeon exactly what is happening inside the joint. They are useful in excluding other possible causes of joint pain.

Other Investigations that may be helpful: -

Tomograms

Special x-rays which give cross-sectional views of the joint.

Arthrograms

Contrast material is injected into the joint before the x-ray is taken. This gives a better view of the joint cartilage but is an exacting technique and the results may be difficult to interpret.

Arthroscopy

The insertion of a fine ‘telescope’ into the joint in order to obtain a direct view. This is a very useful examination for large joints such as the knee but unfortunately only the upper space of the jaw joint may be examined in this way and only a limited examination is possible.

Examination under a general anaesthetic

This allows manipulation of the joints after the abolition of all muscle tension. It helps your surgeon decide whether there is a genuine mechanical obstruction within the joint, which could possibly be treated surgically, or whether another cause must be looked for.

Treatment

If your joints click but there is no pain or locking, treatment is not necessary. Almost one in five of the population has a painless clicking jaw joint. If there is

pain and/or locking, treatment may be justified. It is a difficult problem and treatment is not always successful.

Non-Surgical (conservative) Treatment

The aim is to reduce spasm in the jaw muscles and allow the joint structures to find their correct rest position. Any of the following may be recommended:

Jaw Exercises

To educate the jaw in the correct pattern of movements

Bite Analysis

Sometimes a displaced tooth will interfere with the bite and cause abnormal jaw movements.

Bite guard or Bite Raising Appliance

There are several designs of these plastic plates. They are worn on the teeth and take some of the biting stress off the joints, allowing the cartilage to repair itself and return to its correct position within the joint.

Physiotherapy

This may help to overcome spasm within the jaw muscles.

Medical treatment

Muscle relaxants or other medications may be prescribed, usually in association with the other forma of treatment already mentioned.

Surgery

This is recommended for only a few patients. The aim is to reposition the displaced cartilage and reduce the hypermobility of the joints or correct the abnormal bite.
The decision to undergo surgery is always yours. The degree of success certainly depends on the skill and experience of the surgeon and anaesthetist. Equally important are the specific problems, the age, health and co-operation of the patient. These are widely variable factors that limit the surgeon and affect the surgical result.

Patient Information

Jaw joint dysfunction is a difficult and to some extent controversial subject. We hope that this leaflet has answered most of your questions.

If you wish to discuss any further aspects of your treatment please do not hesitate to ask.

Further information is available from

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