

# Facial Pain

## Objectives:

1. To be able to differentiate pain caused by sinus disease from pain caused by other disease
2. To know the correct investigation and management of non-sinus facial pain

One of the common challenges for primary care doctors and ENT Surgeons alike is to differentiate between patients with facial pain due to sinus disease and that caused by a number of other muscular and neurological causes.

The job is made harder for a few reasons: patients are often convinced that the problem is in their sinuses and may start the consultation by saying so. Secondly the symptoms of rhinitis are so common in the general public that the doctor may be led to assume that, because the patient has a runny and blocked nose with facial pain, they have sinus disease when they have two problems – rhinitis and facial pain. Occam's razor is not always correct.

## Causes of non-sinus related facial pain

There are many of these but the common and important ones are:

1. Facial arthromyalgia (temporomandibular joint associated pain)
2. Mid-facial segment pain
3. Tension headache
4. Dental disease

Other causes not dealt with here include:

1. Trigeminal neuralgia
2. Paroxysmal hemicranias
3. Cluster headache
4. Migraine

## Facial arthromyalgia

This is a condition of the temporomandibular joint and its associated muscles: temporalis, masseter, and the medial and lateral pterygoids. Pain can radiate out from these sites to include the ear and the face and forehead.

The patient will usually have a history of the following:

1. Bruxism – grinding the teeth often at night and causing increased pain first thing in the morning
2. Clenching the jaw during the day
3. Excessive use of chewing gum
4. Recent dental work

5. Facial and jaw trauma
6. Anxiety

Signs and symptoms of facial arthromyalgia:

1. Pain and tenderness around the TMJ
2. Tenderness in any of the associated muscles
3. Pain on movement of the jaw
4. Trismus
5. Deviation of the jaw on opening and closing
6. Joint crepitus may be present but in isolation is not significant.

Some of the stranger symptoms that facial arthromyalgia can cause are tinnitus and dizziness.

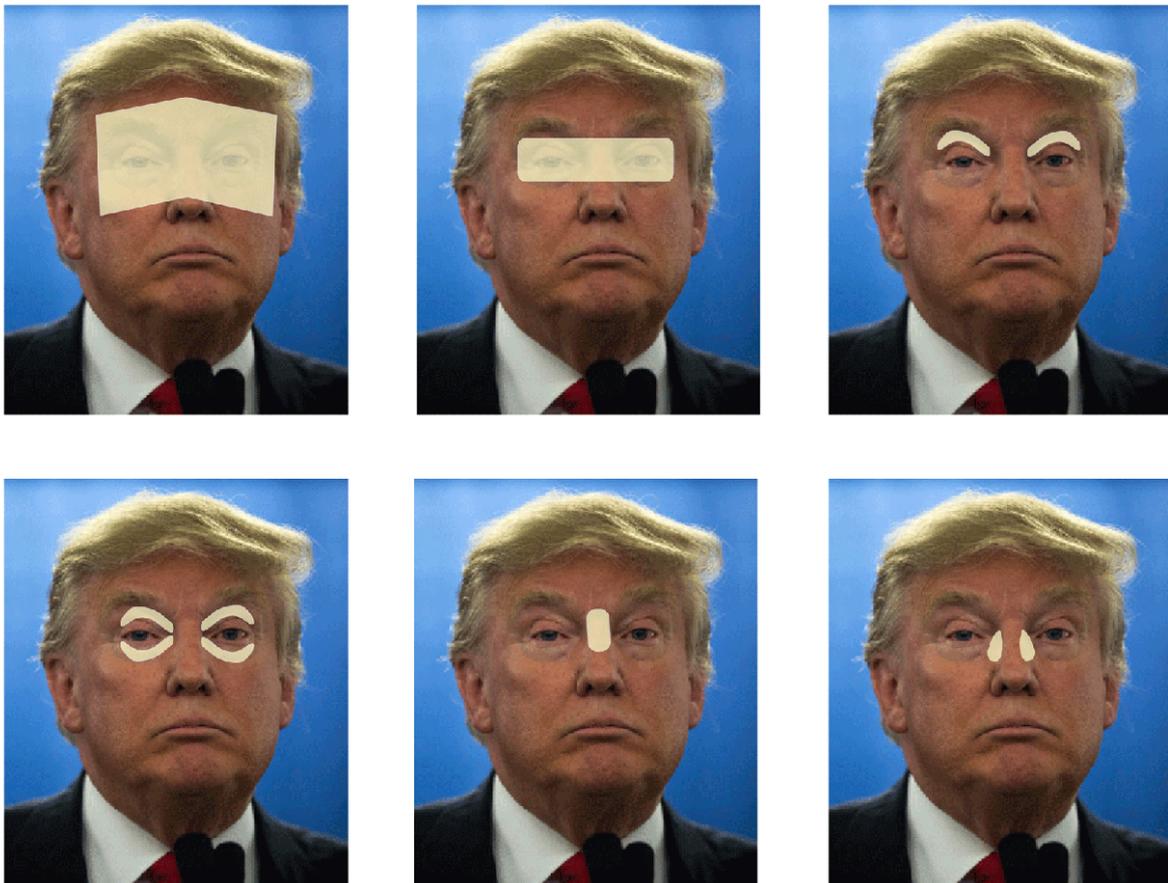
### Tension Headache

This is a tension or pressure over the forehead, temples and sub-occipital areas that should be present for more than 15 days per month and for more than three months. Patients also complain of hyperaesthesia of the skin over the same area and some tenderness.

It is a diagnosis of exclusion and treated with low dose Amitriptyline or Gabapentin.

### Mid facial segment pain

This is analogous to tension headache but is in a different distribution. The diagram below shows where patients indicate their pain is and if a patient points to these areas it is important to consider the condition.



Midfacial Segment Pain Distribution

The nose can feel blocked and the sensation lasts for hours or is continuous.

Examination of the nose will be normal and the condition does not improve with standard treatments for sinus disease.

It is treated in the same way as tension headaches.

### **Trigeminal Neuralgia**

I mention this only to say that it is difficult to confuse this disease with any of the above. Trigeminal neuralgia causes an intense, agonising, lancinating pain and is induced by a trigger point. It is commoner in the middle and lower face.

### **Key point**

Some of the non-sinus causes of facial pain are described above. The key thing to consider here is whether the patient has sinus disease or not. This can be difficult.

For example, what if the patient has rhinitis and mid-facial segment pain? This is a common occurrence as about 35% of the population have rhinitis at any one time. It follows that 35% of mid-facial pain patients also have rhinitis.

This is one reason why patients with facial pain are misdiagnosed as having sinusitis – and why they don't respond to standard treatments for sinus disease.