Benign Indomethacin-Responsive Headaches Presenting in the Orofacial Region: Eight Case Reports

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Dr Elizabeth Moncada Center for TMD and Orofacial Pain Section of Restorative Dentistry University of California, San Francisco School of Dentistry 707 Parnassus Avenue, Room D1050 San Francisco, California 94143-9768 Indomethacin-responsive headaches can present in the orofacial region. According to the classification of headache by the International Headache Society, indomethacin-responsive headaches include chronic paroxysmal hemicrania, hemicrania continua, benign cough headache, benign exertional headache, and sharp, short-lived headache pain syndrome. The mechanism by which indomethacin produces its therapeutic effects in these headache disorders remains speculative. A review of indomethacin-responsive headaches and eight cases in which the presenting symptom was orofacial pain are reported. Because these headache disorders are rare but may present as facial pain, they should be considered in the differential diagnosis of orofacial pain. A comprehensive evaluation prior to performing irreversible treatments is essential when an idiopathic facial pain presents to the dental clinician. J OROFACIAL PAIN 1995;9:276-284.

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any conditions that are considered primary headache disorders can present as orofacial pain.12 Some are potentially life threatening (eg, cerebrovascular hemorrhage, neoplasm, infections), and others are benign. Nevertheless, these conditions must be ruled out prior to any irreversible dental treatments. Guidelines for classification and diagnosis of headache and temporomandibular disorders have been published by the International Headache Society (IHS)3 and the American Academy of Orofacial Pain.4 The use of these classification systems helps when considering the differential diagnosis of orofacial pain.

At times, after performing the necessary diagnostic procedures (eg, musculoskeletal examination, neurologic examination, intraoral examination, blood work-up, and imaging), the clinician is left without an obvious local cause for the presenting pain. Careful evaluation of the presenting symptoms and the diagnostic procedures in conjunction with the current classification systems can be the key to the diagnosis of an orofacial pain disorder.

There have been reports of chronic paroxysmal hemicrania (CPH) and benign cough headache (BCH) presenting as toothache or orofacial pain. 5.6 Other indomethacin-responsive headaches include hemicrania continua, benign exertional headache, and sharp, short-lived headache pain syndrome.7-48 Many of these benign headache disorders can be provoked by physical stimulation (eg, exertion, cough, flexion/extension of the neck). Some are associated with migraine and autonomic symptoms (eg, nausea, vomiting, photophobia, phonophobia) and may respond to migraine therapy. Nonetheless, the clinical features (eg, location, laterality, intensity, quality, age range, gender, and other associated symptoms) for each of these headache disorders are unique. A review of the IHS "Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain" is recommended.3

The pathophysiology of the indomethacinresponsive headache disorders is not known. Raskin49 speculates that they may result from sudden and/or repeated intracranial pressure elevations. The mechanism by which indomethacin produces its therapeutic effects in these benign headache disorders remains speculative. Currently, the proposed mechanisms of action of indomethacin in these benign headache disorders are reduction of cerebral blood flow,50 reduction in cerebrovascular permeability,51 and reduction in cerebrospinal pressure.52

The following cases describe orofacial pain presenting as indomethacin-responsive pain. It is worthwhile to discuss the issue of making a diagnosis based on a treatment response. One could argue that indomethacin provides excellent analgesia, which may detract from the specificity of the indomethacin effect. However, it is generally accepted that, for indomethacin-responsive pains, other equipotent analgesics do not provide as efficient and complete a response.

Case 1

A white man aged 38 years presented with three complaints: (1) severe, intermittent, stabbing occipital headaches on the right side; (2) unilateral, throbbing and pressing frontal headaches; and (3) intermittent "bruising" pain in the left jaw.

History

When the stabbing occipital headaches started, they were associated with exertion or just prior to orgasm. The stabbing pain occurred several times a day and could last anywhere from a few minutes to 20 minutes.

At the time of the evaluation, the throbbing frontal headaches were occurring every 2 to 3 days for up to 30 minutes and could be ameliorated by coffee or Excedrin (Bristol-Myers, New York). These throbbing headaches were associated with loss of balance and sometimes with photophobia and phonophobia. Dizziness or the loss of balance was also reported without pain. Anxiety appeared to be an aggravating factor for the throbbing headaches.

The patient reported that the pain on the left side of his jaw started after a routine dental examination and tooth cleaning under local anesthesia. After having had his mouth open for the duration of the procedure, he noted pain on the left side of his jaw and some limitation in mouth opening The bruising pain occurred during functioning and was aggravated by jaw movements to the right. The past medical history was within normal limits. except for positive vegetative signs of depression. including feeling low and difficulties concentrating.

Examination

The review of systems was noncontributory, except for the spontaneous loss of balance and the dizziness. The neurologic screening examination of dental and cranial nerves II to XII were noted to be within normal limits. The stomatognathic examination revealed limited interincisal opening (35 mm), protrusion (4 mm), and right laterotrusion (7 mm). Fluori-Methane spray (Gebauer, Cleveland, OH) was sprayed on the masseter and temporalis areas, resulting in a 9-mm increase in the interincisal opening. There was also evidence of intermittent clicking of the left temporomandibular joint (TMI). There was no sign of joint crepitus or tenderness of the TMJ. Examination of the upper quarter and the cervical spine revealed the head to be slightly bent to the right side, with the left shoulder elevated. There was an anterior head position of 9 cm from a tangent to the thoracic vertebrae. Left lateral flexion and right rotation of the neck was limited. The myofascial examination revealed active trigger points in the left anterior temporalis and left superficial masseter muscles, and latent trigger points in the right temporalis and the right masseter muscles.

Diagnosis and Treatment

The initial differential diagnosis included (1) migraine without aura, (2) benign coital migraine (benign exertional migraine), (3) myofascial pain and secondary muscle splinting, and (4) temporomandibular dysfunction not contributing to pain. Each condition was approached separately.

The musculoskeletal pain was addressed using an exercise program to restore range of motion aided by Fluori-Methane spray and stretch. An existing mandibular stabilization appliance was adjusted and the patient was instructed to use it nocturnally.

The headache was treated initially with indomethacin, which was titrated to 100 mg per day. This prevented the coital pain. The patient developed sensitivity to indomethacin, resulting in itching. This has caused the patient to use 50 to 100 mg of indomethacin intermittently prior to sex. He reports that the majority of times he can prevent the onset of pain.

Because of the potential for neurologic problems, the patient underwent a comprehensive neurologic evaluation that included magnetic resonance imaging (MRI) and electronystagmography. The neurologist reported abnormalities and believed that the dizziness was related to migraine.

The migraine was treated with amitriptyline hydrochloride at doses between 75 and 100 mg, in conjunction with withdrawal from caffeine and analgesics. This treatment produced a significant result. Financial constraints have prevented further treatment for depression.

Case 2

A white woman aged 61 years presented with the complaint of severe, intermittent, postauricular pain and sharp, boring, auricular pain on the right side. She described the pain as a sharp, wood object being driven into her head and reported a sensation of increased temperature on the right side of her face with the pain. No other autonomic signs were present. There was no associated aura, photophobia, or phonophobia.

History

The headaches began in 1960, with one severe attack. It was not until 5 years prior to the evaluation for the present study that the pain reoccurred. The attacks, which could wake her from her sleep. lasted from a few seconds to 1 minute and occurred two times per day.

The patient's physician had treated the attacks as part of an arthritic condition with injections of cortisone at the base of the skull, which she believed may have helped her. An MRI of the brain was within normal limits. Treatments with several anti-inflammatory medications only upset her stomach. The patient stated that there were no aggravating factors and that the only alleviating factors appeared to have been indomethacin and meperidine hydrochloride (Demerol, Sanofi Winthrop, New York). Reviews of systems and psychosocial history were noncontributory.

Examination

The oral examination and the neurologic screening examination of the cranial nerves II to XII were within normal limits, except for hearing loss in the right ear. The hearing loss had been progressive for many years. The stomatognathic and cervical spine examinations were within normal limits, except for some evidence of alteration in posture, with the head being slightly bent to the right, and the presence of an elevated shoulder. There was mild tenderness over the transverse process of the first cervical vertebra (C-1). The myofascial examination revealed some latent trigger points in the right masseter and right trapezius muscles at the nuchal line.

Diagnosis and Treatment

The patient was diagnosed with one of the indomethacin-responsive headaches that are often described as ice-pick pain or jabs and jolts. Although her pain was somewhat longer in duration than commonly seen in most cases of ice-pick pain, the location, quality, description that included an autonomic sign (temperature change in the face), and the responsiveness to indomethacin were suggestive of an indomethacin-responsive headache. Since a trial of indomethacin at a low dose was attempted with some resulting success, the dose was gradually increased to 150 mg per day, which controlled her pain. At 1-year follow-up, she continues to use between 100 and 150 mg of indomethacin per day. She has no sequelae from this medication.

Case 3

A white man aged 34 years presented with the complaint of an intermittent left parietal and temporal pressing-to-throbbing headache. The pain was associated with nausea and photophobia, and it typically occurred after 20 to 30 minutes of physical exertion. The frequency of pain depended on the level of exertion.

History

The patient first noticed the pain, while jogging, 3 years prior to the evaluation of the present study. The pain was triggered by any exertion, lasted several minutes, and occurred several times per week. The pain did not abate unless the specific exertional activity was stopped. The patient noticed that the headache was associated with a slight drooping of the left eve lid (ptosis) and warming of the left ear. There were times when the headaches were associated with nausea. In conjunction with these short-lived pains was a longer-lasting, dull, aching headache that did not have to be triggered by exertion but could be aggravated by stress. The only alleviating factor for this dull pain was a left auricular-temporal block with steroid administered by an anesthesiologist. Additionally, the patient was evaluated by his internist, who thought his labile hypertension may be contributing to the headaches. A medication trial of prazosin hydrochloride (Minipress, Pfizer, New York) was attempted with no relief from the headaches. Amitriptyline hydrochloride was tried, but the headaches did not remit. Prior to this evaluation. the patient had been placed on 75 mg of indomethacin twice a day and was not getting any relief from his headaches. Angiography, urine analysis, and brain MRIs were ordered to rule out intracranial pathology and pheochromocytoma. and all were within normal limits. Evaluations by an ear, nose, and throat doctor; an ophthalmologist; and a neurologist were also within normal limits. Review of systems was noncontributory, except for hypertension controlled with 40 mg of lisonopril (Prinivil, Merck, West Point, PA) per day. He also had an asymptomatic ruptured disc between the first and second lumbar vertebrae. The psychosocial history was noncontributory.

Examination

The neurologic screening examination of cranial nerves II to XII and the oral, stomatognathic, and cervical examinations were within normal limits, except for some evidence of minimal postural abnormalities. The myofascial examination revealed latent trigger points in the left and right posterior temporalis and the left sternocleidomastoid muscles.

Diagnosis and Treatment

It was believed that based on the history and examination, the patient was suffering from (1) benign exertional headache and (2) myofascial pain. Perpetuating factors included work, stress, and poor postural habits. Management included a home exercise program to improve posture and body mechanics. There was some improvement in the patient's longer-lasting, dull, aching headaches after initiation of the exercise program and triggerpoint injections of 2% procaine hydrochloride. Concomitantly, the indomethacin was increased to 250 mg per day with some improvement in the frequency of his shorter-lasting postexertion headaches. The 0.2 mg of methylergonovine maleate (Methergine, Sandoz Pharmaceuticals, East Hanover, NI) four times per day and an Ergotamine Medi-haler (3M Pharmaceuticals, St Paul, MN) completely controlled the pain prophylactically and at the onset.

Case 4

A white woman aged 64 years presented with the complaint of intermittent, boring, aching temporal headaches on the left side and a daily bilateral postorbital and temporal pressurelike headache. The pain lasted 15 minutes and occurred spontaneously up to six times per day.

History

The headaches began 12 years prior to the evaluation for the present study. The patient had received three neurologic consultations, which were within normal limits. A computerized tomography (CT) of the brain was normal. She had seen a dentist who diagnosed a TMI problem. A complete mouth reconstruction was performed to increase her vertical dimension, but her headaches did not remit. Arthrograms of the TMI were obtained. An oral surgeon recommended condyloplasty of the left TMI, but the patient declined this surgery. Reviews of systems and psychosocial history were noncontributory. Aggravating factors included hunger, certain foods, stress, combing and washing her hair, and hot and cold temperatures in her mouth. Alleviating factors included aspirin (Ecotrin, Smithkline Beecham Consumer Brands, Pittsburgh, PA) and naproxen (Naprosyn, Syntex Laboratories, Palo Alto, CA).

Examination

The neurological screening examination of cranial nerves II to XII and the oral examination were within normal limits. The stomatognathic examination revealed limited passive range of motion of the mandible (37 mm) with slight deviation to the left. Examination of the upper quarter and the cervical spine was normal, except for some minimal postural abnormality. The myofascial examination revealed trigger points in the left anterior temporalis, left sternocleidomastoid, and left anterior trapezius muscles. The patient's headache complaints were not reproduced by the myofascial examination.

Diagnosis and Treatment

It was believed that based on the history and examination, the patient was suffering from (1) chronic paroxysmal hemicrania and (2) myofascial pain. Administration of indomethacin was started, and within 24 hours of 75 mg per day, she was pain free. She has continued to use indomethacin for 4 years.

Case 5

A white woman aged 37 years presented with the chief complaint of continuous sensations of pain, which varied from nagging to stabbing, in the right occipital region radiating to the right eye. The headaches were sometimes associated with nausea, vomiting, photophobia, and phonophobia. The pain was associated with drooping and tearing of her right eye. There was no associated aura. She had difficulty saying certain words when the pain was present.

History

The patient first reported headaches approximately 13 years prior to the evaluation for the present study. Her headaches were initially intermittent but had become continuous over the last 7 years. She reported that aggravating factors included stress, and alleviating factors included sumatriptan succinate (Imitrex, Cerenex Pharmaceuticals Research, Triangle Park, NC) and Fiorinal (Sandoz). She also had been treated with propranolol hydrochloride (Propranolol, Mylan, Morgantown, WV), Cafergot (Sandoz), carbamazepine, amitriptyline hydrochloride, chiropractic manipulations, and biofeedback. Review of systems was within normal limits. Psychosocial history was positive for depression and sexual abuse at age 10 years.

Examination

Dental and stomatognathic examinations were negative, except for signs of tongue mucosal ridging and accelerated tooth wear. The myofascial examination revealed active trigger points in the right anterior temporalis muscle, both of the deep masseter muscles, the right splenius muscle of the head, and the right trapezius muscle. The cervical spine examination was essentially within normal limits, with the exception of minimal postural abnormalities. The neurological screening exami-

nation of cranial nerves II to XII was within normal limits

Diagnosis and Treatment

The history of migraine headache with the regular use of drug rebound-producing medications resulted in a chronic daily headache with myofascial pain. Nonetheless, the unilateral nature of her continuous headache associated with autonomic symptoms warranted the ruling-out of hemicrania continua. The analgesic rebound medications were discontinued. A behavioral medicine program was started after a psychologic evaluation, an upper quarter exercise program, and a medication protocol (25 mg of amitriptyline hydrochloride at bedtime and 75 mg of indomethacin three times per day) were all instituted. At a 1-month follow-up visit, the patient had not had daily headache or migraine, and her myofascial pain was resolving. She had maintained 25 mg of amitriptyline hydrochloride at bedtime and was down to 25 mg of indomethacin per day for control of her hemicrania continua.

Case 65

A white woman aged 53 years presented with the complaint of an intermittent, sharp pain that was localized in the maxillary and temporal regions on the left side. The pain was described as occurring several times per day and was often associated with tearing in the ipsilateral eye and with sweating.

History

The pain attacks were initially felt as pain in the maxillary premolar area, prompting the patient to visit her dentist. The dentist proceeded to perform root canal treatment on the premolar, which did not substantially reduce the pain. The patient then consulted numerous physicians, including internal medicine and neurologic specialists, and was eventually diagnosed as suffering from migraine. Trials using a number of migraine prophylactic medications, including Propranolol and amitriptyline hydrochloride, were attempted without any benefit. The patient reported that her pain had been most successfully reduced by the use of six to 12 aspirin per day. The pain could be triggered by the patient extending her head up and back, as would occur when the patient reached to get a teacup from a cupboard above her head. The pain had also been noted to be worse during cold weather.

Examination

The medical history revealed a family history of migraine, and the patient reported a previous history of some intermittent migrainous symptoms. The review of systems was within normal limits The dental, stomatognathic, myofascial, cervical vertebrae, and cranial nerve examinations were all within normal limits. Psychosocial questioning and psychometric testing with the Minnesota Multiphasic Personality Inventory were within normal limits and unelevated, respectively.

Diagnosis and Treatment

The intermittent, chronic nature of the attacks. occurring several times per day with associated autonomic features and triggerable by certain head movements, led to a preliminary diagnosis of CPH. The fact that only aspirin had been helpful was also suggestive of CPH. The patient was started on a trial of 25 mg of indomethacin three times per day. The patient called 48 hours later to advise that she was pain free. The initial controlling dose was found to be 125 mg, but she is now being maintained on 25 mg without any side effects. The patient has found that the longest she can stay off the indomethacin is 7 days before her symptoms return.

Case 75

A retired white man aged 65 years presented with the complaint of intermittent, daily attacks of pain that were localized to the maxillary molar area. The pain was described as feeling as if a dentist were drilling a tooth without using local anesthesia. The attacks generally lasted 10 to 20 minutes, occurred regularly in the afternoon and during the night, and occasionally woke him from sleep.

History

The pain attacks had been present over a 3-year period, and no triggers that would precipitate the attacks had been identified. There were no associated autonomic symptoms with the pain. When asked if anything aggravated the pain, the patient reported that stress could be a factor. Aspirin was the only alleviating factor described by the patient and was also reported to help stave off an attack. The patient had initially thought the pain was of dental origin, and so he had consulted a dentist. who failed to find any dental pathology. A physician thought that trigeminal neuralgia was a possibility and prescribed 100 mg of phenytoin (Dilantin, Parke-Davis, Morris Plains, NI) three times a day, but this treatment failed to produce any relief from the attacks. The patient was referred to an otolaryngologist. The ensuing examination, together with sinus radiography, proved negative for pathology, and it was suggested to the patient that perhaps a TMJ problem was present. The patient then consulted a second dentist, who thought the problem was unlikely to be related to the TMI, and he was referred to the Cedars-Sinai Anesthesia Pain Center.

Examination

The review of systems was within normal limits. The medical history revealed a family history of headaches. Dental, stomatognathic, myofascial, cervical spine, and cranial nerve screening examinations were negative or within normal limits. Psychosocial questioning was negative for possible depression and did not reveal a need for psychometric evaluation

Diagnosis and Treatment

Assessment of the chronic nature of the attacks, combined with the unilateralness, regularity, duration, and lack of remission periods or triggers, led to a preliminary diagnosis of CPH. It was therefore thought that an indomethacin trial might be helpful, and the patient was started on 75 mg of indomethacin slow release (SR) per day, which was increased to 75 mg twice per day after 4 days. One week later the patient reported total relief from the attacks. One month later he was still free of the pain and was being maintained on 75 mg of indomethacin SR per day.

Case 86

A white man (a physician) aged 45 years presented with the complaint of intermittent, sharp, aching pain in the maxillary right region, with radiating patterns to the ipsilateral temporal region as well as the ear and the back of the head.

History

The patient first reported the problem 2 years prior to his examination at the Cedars-Sinai Anesthesia Pain Center. The pains lasted seconds to minutes and occurred up to 20 times per day. Bending forward, straining, yelling, or coughing triggered the pain. Alleviating factors included nonsteroidal anti-inflammatory agents. He initially thought this condition was of dental origin and consulted a dentist, who found nothing. He was then seen by an endodontist who performed two root canal treatments of the mandibular right first and second premolars, although there was no evidence of local pathology. Through further dental treatment, the patient had a premolar extracted and fixed partial denture placed, both with no relief from pain.

Although a neurologic evaluation suggested a possible contributing factor in the cervical area, an MRI of the cervical spine was normal. An MRI of the TMJ, a TMJ Doppler study, an MRI of the brain, and a CT of the sinuses were performed. All results were within normal limits. An occipital nerve block was also performed with equivocal results.

Examination

The oral, stomatognathic, myofascial, and cervical spine examinations and the neurologic screening examination of cranial nerves II to XII were within normal limits. Palpation of the right carotid artery produced a slight vasovagal response and some pain referral to the right maxilla area. It was difficult to assess the meaning of this response, because repeat testing was not carried out for fear of producing syncope.

Diagnosis and Treatment

The diagnosis after the evaluation was BCH. Due to the carotid artery tenderness, an erythrocyte sedimentation rate (ESR) was ordered to rule out carotodynia. The ESR was within normal limits. The patient was started on 75 mg of indomethacin SR. At the follow-up evaluation 9 days later, the headaches were controlled. At a 1-year follow-up, the patient was still pain free while taking 75 mg of indomethacin per day.

Discussion

Because the indomethacin-responsive headache disorders are so rare and are part of the differential diagnosis of orofacial pain, a comprehensive evaluation prior to performing irreversible treatments is needed when a patient with an idiopathic toothache presents to the dental clinician. Irreversible dental treatments (eg, fillings, crowns,

root canal therapies, extractions) are not recommended until a thorough evaluation is completed and the diagnosis of a dental pathology can be substantiated. The evaluation may include pulp testing, dental radiographs, neurologic examination, blood work-ups, sinus imaging, and brain imaging. Short-term observation and conservative treatment modalities (eg, pharmacologic trials) are recommended if the thorough evaluation is inconclusive, because it can take up to 4 months for any possible dental pathology to manifest.

Conclusion

In the majority of the cases reviewed, musculoskeletal abnormalities needed to be addressed. Although most cases did not reveal significant psychosocial issues that warranted a psychologic evaluation, specific psychosocial screening questions are useful to make the appropriate referral.

In case 1, the indomethacin-responsive pain was benign coital migraine or benign exertional headache. This pain presented in a patient complaining of jaw pain after dental treatments. Although the indomethacin-responsive pain and the pain after dental treatment are deemed to be separate and independent, confusion may exist in such cases if careful differential diagnosis is not employed. In case 3, indomethacin was only partially helpful in controlling the pain. It is recommended that when symptoms like migraine appear, additional consideration be given to combination therapy. Withdrawal of either indomethacin or methylergonovine maleate, in this case, resulted in a resurgence of pain.

Caffeine withdrawal and analgesic rebound headache were also significant factors in cases 1 and 5. Food sensitivity was a significant factor in case 4. The impact that substances, musculoskeletal abnormalities, and psychosocial, systemic, and other factors can have on the mechanisms of these pain syndromes must also be taken into consideration in the overall evaluation and treatment.

Unfortunately, the pathophysiology of the indomethacin-responsive headaches that can present as an orofacial pain is not known. The practicing clinician is encouraged to maintain a broad perspective when presented with an orofacial pain without obvious pathology. The fact that these benign headache disorders presenting as orofacial pain are responsive to indomethacin warrants a careful evaluation by the dental clinician so that unnecessary irreversible treatment can be avoided.

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Resumen

Cefaleas Benignas de la Región Orofacial que Responden a la Indometacina: Reporte de Ocho Casos

Las cefaleas que responden a la indometacina se pueden presentar en la región orofacial. De acuerdo a la clasificación de cefaleas de la Sociedad Internacional de Cefaleas, las que responden a la indometacina incluyen la hemicránea paroxística crónica, la hemicránea continua, la cefalea con tos benigna, la cefalea de esfuerzo benigno, y el síndrome doloroso cefálico agudo de corta duración. El mecanismo por el cual la indometacina produce sus efectos terapéuticos en estos desórdenes cefálicos es todavía especulativo. Se presenta una revisión de las cefaleas que responden a la indometacina y ocho casos en los cuales el síntoma que se manifestó fue el dolor orofacial. Debido a que estos desórdenes son raros pero que se pueden presentar como dolor facial, se deben considerar en el diagnóstico diferencial del dolor orofacial. Es esencial realizar una evaluación comprensiva antes de llevar a cabo tratamientos irreversibles, cuando se presente un caso de dolor facial idiopático.

Zusammenfassung

Gutartige, mit Indomethacin beeinflussbare Kopfschmerzen in der Kiefer-Gesichtsregion: Acht Fal-Ibeispiele

In der Kiefer-Gesichtsregion können Indomethacin-beeinflussbare Kopfschmerzen auftreten. Gemäss der Klassifikation der Kopfschmerzen durch die International Headache Society umfassen Indomethacin-beeinflussbare Kopfschmerzen die chronisch paroxysmale Hemikranie, die hemicrania continua, das gutartige Hustenkopfweh, das gutartige Anstrengungskopfweh und das stechende kurzandauernde Kopfweh Syndrom. Der Mechanismus, nach dem das Indomethacin in diesen Kopfschmerzzuständen therapeutisch wirksam wird, bleibt Gegenstand von Spekulationen. Es wird eine Übersicht über Indomethacin-beeinflussbare Kopfschmerzen geboten und ausserdem über acht Fälle berichtet, bei denen das beobachtete Symptom Schmerz in der Kiefer-Gesichtsregion war. Diese Konfschmerzzustände sind zwar selten, können aber als Gesichtsschmerzen imponieren, und sollten deshalb in die Differentialdiagnose orofacialer Schmerzen einbezogen werden. Für den klinisch tätigen Zahnarzt ist im Zusammenhang mit idiopathischen Gesichtsschmerzen eine sorgfältige Evaluation wichtig, bevor irreversible Behandlungsschritte in die Wege geleitet werden.