I am pleased to introduce this Special Issue on “Orofacial pain, diagnosis and treatment”. Pain signals harm and induces behavioral changes, and chronic pain has a considerable emotional component [1]. The definition of pain, according to International Association for the Study of Pain (IASP), is “an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage”. This definition demonstrates the evaluative and descriptive complexity of pain [2].

Pain involving the head, face, neck or intraoral structures is known as orofacial pain, and can be acute or chronic [3,4]. OFP can be mixed with headaches or involve other organs than those of the orofacial area. After ruling out primary causes of pain, such as dental or periodontal lesions, trauma, sinusitis, salivary gland issues, tumors (local or remote), systemic diseases, etc., we can consider the orofacial pain prototype.

Epidemiological studies have demonstrated that up to a quarter of the population report orofacial pain (excluding dental pain), and up to 11% experience chronic orofacial pain (OFP) [5]. OFP syndromes are associated with significant morbidity and high levels of healthcare utilization [6].

OFP can generally be categorized as one of three major classes [6]:

(i) Temporomandibular disorders (TMD):

Temporomandibular disorders (TMDs) are conditions characterized by musculoskeletal pain and dysfunction in the temporomandibular joint (TMJ) and/or masticatory muscles, and represent the most common chronic orofacial pain conditions [7,8]. According to the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) [9], masticatory myofascial pain can: be localized to the site of palpation; spread beyond the site of palpation but remain confined to the muscle boundaries; or be referred. Pain is usually self-limited with complete remission of symptoms, and thus, conservative reversible treatment is the preferred strategy [10]. However, in about one third of patients, it can become chronic and persistent [11]. Typical myofascial pain is unilateral, located at the angle of the mandible and pre-auricular area; it is of moderate intensity and possesses a dull, pressing quality. Pain tends to increase with function, and there may be associated limitation in the range of mandibular movement [12].

(ii) Neuropathic pain:

Neuropathic pain is caused by damage or injury to the nerves. It can originate from the central nervous system, as is the case for trigeminal neuralgia (TN), a severe unilateral pain disorder characterized by brief, electric-shock-like pain attacks in the trigeminal nerve distribution, mostly in the mandibular and maxillary branches [13]. Damage to the peripheral nervous system can result in painful post-traumatic trigeminal neuropathy (PPTN) [14] (e.g., nerve damage after routine dental treatment such as endodontic treatments or extractions). Viral infections can be the origin of neuropathic long-lasting pain, as is the case for Post Herpetic Neuralgia (PHN), which is caused by secondary herpes zoster infection. Sometimes, the underlying cause of the pain is enigmatic. An example of a syndrome of unknown origin is Burning Mouth Syndrome (BMS), characterized by an intraoral burning or dysesthetic sensation, without evident causative lesions upon clinical examination and investigation [15].
(iii) Neurovascular pain:

Neurovascular pain is a general term comprising several pain types with related characteristics. Migraine is the most common headache disorder, usually starting at a young age and with higher occurrence in females. Neurovascular orofacial pain (NVOP) [16] is a form of migraine-like pain in the orofacial region. Trigeminal Autonomic Cephalalgias (TACs) are primary headaches characterized by strictly unilateral pain with accompanying autonomic symptoms; TACs include: cluster headache, paroxysmal and hemiserialia continua and SUNCT (short-lasting, unilateral, neuralgiform headache attacks with conjunctival injection and tearing) [4].

After considering a differential diagnosis and ruling out possible secondary reasons, the treatment of primary OFP may proceed. However, in cases of chronic pain, we rarely treat; the preferred word is “management” [6]. Common management options may include pharmacologic therapy; this can be an abortive therapy such as NSAIDS, or prophylactic, which usually includes anti-depressants, anti-epileptics, or other drug families such CGRP receptor antagonists, antihypertensive drugs, cannabis, etc. Other treatment modalities may include physiotherapy (at home or in the presence of a professional), medical devices such as dental night guards [17], TENS or ultrasound, trigger point injections, the botulinum toxin, psychological aid such as cognitive behavioral therapy (CBT), surgery or arthrocentesis (TMJ-oriented), or complementary medicine.

OFP and headaches can arise from any of the structures in the head and neck area, which are in close proximity to each other. The underlying anatomical complexity of the region causes diagnostic and therapeutic challenges.

Pain and orofacial pain specialists, neurologists, ENT specialists and dental practitioners form the target audience of this Special Issue. I am certain that the accepted manuscripts will advance the understanding and treatment of orofacial pain.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

References


