Atypical odontalgia: quo vadis?



A patient presents with persistent pain in the lower posterior quadrant with no associated dental or periodontal pathology. What diagnosis comes to mind? Probably most readers will opt for atypical odontalgia (AO). Such patients are not rare in general practice and we are often frustrated by the apparently "dental" nature of the pain and the lack of objective findings to support this.

AO is still used widely in the literature, but what does it precisely describe? The varying definitions suggest that this is unclear. For example, the American Academy of Orofacial Pain (AAOP) describes AO as a constant, longlasting pain in a tooth without major pathology and comments that these cases probably reflect a type of traumatic neuropathy. However, the International Association for the Study of Pain (IASP) defines AO as a severe throbbing pain in the tooth without major pathology. This latter definition may suggest that AO is a neurovascular type of pain; neuropathies are very rarely throbbing in quality. AO is considered a localized expression of the historic "atypical facial pain" (AFP) and this same diagnostic problem is apparent in the approach to AFP. Some clinicians believed that AFP was a neurovascular entity and successfully treated these with migraine-specific drugs. Others related to AFP as a neuropathic pain, probably of traumatic origin. To confuse the issue, some clinicians use the term AO to describe pain in edentulous regions. This is not reasonable terminology - there cannot be a "toothache" (odontalgia) where there is no tooth!

Interestingly, AFP is no longer in use. Instead the term "persistent idiopathic facial pain" (PIFP) is in current use. As a clinician diagnosing and treating orofacial pain (OFP) for over 30 years, I have seen the use of AFP, and subsequently PIFP, dwindle. This has been the result of increased knowledge and improved diagnosis. We now recognize neurovascular pains in atypical locations around the face and oral cavity. The thorough researching of chronic masticatory muscle pain and its referral patterns has increased our diagnostic accuracy. The careful documentation of pain occurring after trigeminal nerve injury has established a novel diagnostic entity. We have come far in our diagnostic capabilities.

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Notwithstanding, we recognize that there are cases that will resist any diagnosis. These cases usually share a clinical phenotype: long-lasting pain in an intraoral area (both in dentate and edentulous areas) with no apparent pathology. Some have a history of very mild trauma (eg, scaling) but present no sensory changes precluding a diagnosis of traumatic neuropathy. It is unclear what disease process underlies these presentations, and as such a diagnosis is impossible. At best a descriptive term may be used, for example "persistent dento alveolar pain".

With this in mind, it is probably the right time to stop using the term AO. Applying current knowledge will allow the diagnosis of many difficult OFP cases as neurovascular orofacial pain, referred pain from muscle, or painful traumatic neuropathy. Many of these cases will include a history of repeated dental interventions. Certainly in any of these difficult presentations the last thing you want to do is to attempt further dental treatment aimed at solving the problem. Research has shown that such misguided surgical interventions often exacerbate rather than resolve pain. Your patients will appreciate a careful explanation and benefit from appropriate referral.

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