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Persistent dentoalveolar pain disorder

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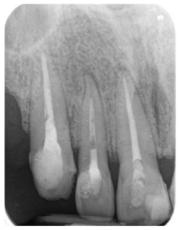
Persistent dentoalveolar pain disorder (PDAP), also referred to as atypical odontalgia and phantom tooth pain, thought to be a component of persistent idiopathic facial pain, is characterised by persistent tooth pain over dentoalveolar area in the absence of detectable pathology.[1]

The prevalence data suggests that PDAP has a frequency of occurrence following root canal therapy of around 1.6-2.1%.[2,3] Most cases are found in female patients.[4] The symptoms may follow minor surgery or mild injury to the face, teeth, or gingivae, and persist after healing without a clear local cause. Currently this condition comes under the new classification of chronic primary pain.

Clinical features



PDAP is associated with pain and/or dysesthesia present in an area currently or previously occupied by a tooth or teeth.[5] PDAP rarely occurring in multiple sites, with variable features but recurring daily for more than two hours per day for more than three months, in the absence of any preceding causative event.[6]

Diagnostic criteria

International Classification of Orofacial Pain, 1st edition (ICOP).[6]

A. Intraoral dentoalveolar pain fulfilling criteria B and C
B. Recurring daily for >2 hours/day for >3 months[1]
C. Pain has both of the following characteristics: 1. localised to a dentoalveolar site (tooth or alveolar bone);[2] 2. deep, dull, pressure-like quality[3]
D. Clinical and radiographic examinations are normal,[4] and local causes have been excluded
E. Not better accounted for by another ICOP or ICHD-3 diagnosis.[5]

Notes:

1. Prior to three months, if all other criteria are fulfilled, code as probable persistent idiopathic dentoalveolar pain.
2. Pain is rarely in multiple sites. With time, it may spread to a wider area of the craniocervical region.

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3. A wide variety of words are used to describe the character and quality of the pain. It may be described as either deep or superficial, and adjunctive symptom description may be employed to explain the complexity of sensations associated with this disorder. Furthermore, the pain can have exacerbations and be aggravated by stress.
4. Clinical somatosensory assessment with pinprick or light touch perception only very rarely reveals sensory abnormalities. Nociplastic pain reflecting altered processing in the somatosensory system may be present, and related to alteration in the modulatory pain inhibitory system.
5. Quantitative sensory testing differentiates the two subtypes. A diagnosis of Persistent idiopathic dentoalveolar pain implies that quantitative sensory testing has not been performed. Once it has, either of the two subtypes Persistent idiopathic dentoalveolar pain without somatosensory changes or Persistent idiopathic dentoalveolar pain with somatosensory changes should be diagnosed.

Management

- This diagnosis comes under the heading of recent IASP classification called Chronic Primary Pain which indicates that there is no pathology at the site of pain and the pain has been present for more than three months.
- PDAP is a diagnosis of exclusion; potential structural lesions, such as craniofacial neoplasms or abscesses, among others, need to be ruled out.
- Comprehensive subjective assessment of the chief complaint, head and neck exam, cranial nerve exam, and review of the patient's medical and mental (psychosocial stressors), dental, medication, and social history is necessary.
  - Exclude any central pathology with CT/MRI, carry out baseline blood tests including liver function and kidney function.
- Unfortunately, once the diagnosis of PDAP is established, the treatments focus upon managing the symptoms of condition rather than delivering a cure.
- Discuss in a sympathetic manner.
- Reassure and educate the patient that there is no organic cause of this condition and is unlikely to benefit from surgical procedure.
- Avoid secondary injury or invasive management.
- Psychosocial therapy and medications are preferable.

Topical	Systemic
Capsaicin	Tricyclic antidepressants e.g. Nortriptyline
Lidocaine injection	Serotonin-Norepinephrine reuptake inhibitors
EMLA cream	Anticonvulsants Membrane stabilisers (Gabapentin and pregabalin)

  - Topical measures – If diagnostic anaesthesia reduces pain with topical anaesthetic then the patient might be prescribed topical EMLA PRN.
  - Neuropathic pain medications: Tricyclic antidepressants – First line would be nortriptyline (has fewer side effects to amitriptyline and may be used in combination with Gabapentin).
  - Alternative systemic medications used in the treatment of PDAP include membrane stabilisers such as gabapentin and pregabalin.
  - Medication should be titrated upwards slowly until you find the lowest effective dose.

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