CASE REPORT

Tooth Ache to Leprosy! Importance of Revisiting Diagnosis

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Abstract Atypical facial pain can be dreadful for the patient, and treating it can be an arduous task for the clinician, unless the diagnosis is constantly revisited.

Introduction

There are some diseases which the medical world considers extinct [1] and others which are considered almost extinct [2]. However, it appears that the theory of survival of the fittest is applicable even to microorganisms, to the extent that they have started practising adaptive camouflage in their clinical presentations, so as to mislead clinicians. The importance of careful and repeated review of the clinical diagnosis is highlighted in this case of a lady who presented with persistent facial pain.

Case

A 53 year old lady presented to us in September 2013 with complaints of pain over the left side of her face for more than 2 years. She had been diagnosed to have Trigeminal Neuralgia elsewhere, prior to which extractions of the second quadrant 2nd and 3rd molars had been performed, with no relief from her symptoms. Here she was referred to

ENT department where sinusitis was ruled out. Following evaluation in the neurology department she was commenced on carbamazepine (200 mg twice daily) for trigeminal neuralgia, however pain persisted. A MRI of the brain was done and reported as “vascular loops are seen in close relation to the cisternal segments of the trigeminal nerves bilaterally, with mild indentation of the nerve on the left side.” The treatment options were microvascular decompression (MVD) and radio frequency, which were discussed with the patient; she chose to undergo MVD. Microvascular decompression of the fifth cranial nerve on the left side was therefore performed in April 2014.

As there was still no relief from pain following the surgery, she reported back to the dental department. Clinical examination at this time revealed that she had mild redness of the skin in the left infra orbital region and tenderness in teeth 24, 25, 26 which were then extracted. The extractions did not offer any respite, though when a left infra orbital nerve block was given she had relief from pain. The procedure of infra orbital neurectomy was explained to her and it was done in July 2014. During the post-operative period she had relief from pain and was discharged. She reported back in June 2015 with pain in the gums in the upper left region and redness of the left side of the face. On examination, the left infra orbital area, from lateral to the side of nose to the malar prominence and inferiorly to the upper lip was remarkably erythematous but was neither elevated, indurated nor were there any ulcerations or blisters (Fig. 1). The patient complained about numbness of the skin over the left infra orbital region and pain in the gingiva over the extracted 24, 25, 26 region on palpation. In view of the well demarcated erythematous area, the possibility of herpes zoster (shingles) was considered and she was prescribed Acyclovir 800 mg 5 times a day for 5 days.

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Fig. 1 Erythematous area over left malar region

When she presented again with no relief from pain, she was referred to the dermatology department by the end of June 2015 where a biopsy of the skin was done which was reported as borderline tuberculoid Hansen's disease (BTHD) with type 1 skin reaction.

The pictomicrograph (Figs. 2, 3) shows skin with subcutis. The epidermis shows hyperkeratosis, epidermal atrophy and flattened rete pegs. There is a pan dermal infiltrate of granulomas composed of epithelioid histiocytes, foamy histiocytes, few lymphocytes, plasma cells and few multinucleate giant cells extending throughout the dermis around and into nerves and sweat ducts. The superficial and mid dermis shows edema and telangiectasia. She was started on Dapsone, Rifampicin and Prednisolone and at 6 months follow up she was a relieved patient without pain and the redness on the left infra orbital region had disappeared.

Discussion

It is not uncommon to find patients reporting to dentists with a history of facial pain for which they have already had tooth extractions, with no relief from pain. Trigeminal neuralgia is one common diagnosis which has been preceded by unnecessary multiple tooth extractions [3]. There have been many reports of post extraction herpes zoster [4], as well as tooth extractions being performed to reduce the pain of post herpetic neuralgia!

Literature gives us insight into the approach [5] and process of diagnosis [6], and also how the outcome of a diagnosis can affect clinical decisions in the future [7]. While there are

Fig. 2 Pictomicrograph

Fig. 3 Pictomicrograph

several clinical situations where there may not be a complete cure or solution that is available, it is the responsibility of the clinician to systematically and thoroughly review the problem and revisit the diagnosis based on the outcome, to avoid diagnostic errors. In the case scenario described above, it would have been very hard to arrive at a diagnosis of “painful!” leprosy (BTHD) at the first instance, but the systematic assessment by the various specialist departments continued, who went through their routine process of diagnosis and treatment [8] until repeated reassessments led us to the final diagnosis in this unusual clinical manifestation of borderline tuberculoid Hansen's disease [9].

Conclusion

There are certain situations in clinical practice which can require immense patience and persistence on the part of the clinician to arrive at an accurate diagnosis and provide

appropriate care to the patient. Revisiting and revising clinical diagnosis can help avoid treatments that are unnecessary or which aggravate the problem, but will unmask the real condition.

Compliance with Ethical Standards

Conflict of Interest All the above authors declare that there is no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent No research was done on the patient but all procedures were done with informed consent of the patient.

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