

WISDOM TOOTH: THE VESTIGIAL DILEMMA

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Abstract- Wisdom teeth, or third molars, stand as anatomical remnants of our evolutionary past—once essential for processing coarse diets, now often misaligned with modern human needs. This review paper explores the vestigial nature of wisdom teeth, examining the clinical, and ethical dimensions of their existence and management. While some third molars erupt harmlessly, many become impacted or cause complications, prompting routine prophylactic extractions. However, recent evidence questions the necessity and long-term benefits of removing asymptomatic third molars, highlighting a need for more individualized, evidence-based approaches. Through an interdisciplinary lens combining dental science, evolutionary biology, and public health, this paper evaluates current practices, complications, cost implications, and shifting perspectives around third molar extraction.

I. PROCLAMATION

'It is scarcely possible that disuse can go on producing any further effect after the organ has once been rendered functionless.' -Charles Darwin (Origin of Species)

People get their wisdom removed without attaining the knowledge of why they have them and even the risk factors associated with the same. Why would nature build humans with a part of the body that has to be removed? The answer is beguiling glimpse into the prehistoric world of humans' ancient ancestors.

II. HISTORICAL ACCOUNT

The term 'Wisdom teeth' find its roots in ancient Greek civilization which possesses very unique and intriguing history. Wisdom teeth were once an extremely valuable asset to our ancestors and have been with humans for hundreds of millions of years and lost their usage in the past few thousand centuries. As per Anthropologists when a typical diet consisted of chewy plants, hardy seeds and protein rich uncooked meat, third molars (wisdom teeth), which fit easily into our ancestors' larger jaws, were absolutely necessary. Infact, they were the evolutionary answer to the need for chewing power to combat the excessive wear produced in order to bite, rip, and chew their food into digestible

consistency. In Native American folklore, the appearance of wisdom teeth was regarded as a symbol of personal growth and spiritual development.

III. WHY WISDOM TEETH?

What is so wise about 'the wisdom teeth'? Why are they called so? Aeons ago, in Ancient Greece, Aristotle mentioned wisdom teeth in his book, The History Of Animals Writing...

"The last teeth to come in man are molars called 'wisdom teeth', which come at the age of twenty years, in the case of both sexes. Cases have known in women upwards of eighty years old were at the very close of life the wisdom teeth have come up, causing great pain in their coming..." - Aristotle, The History Of Animals

As Aristotle describes, wisdom teeth are so called because they don't fully emerge until a person's young adult years, usually between 15-25 years of age. From an evolutionary point of view, wisdom teeth surely has sparked some debates associated with their eruption and whether they need to be extracted or not.

IV. WISE OR WOE?

Although wisdom teeth were marvellously advantageous for our ancestors, they doesn't seem that way for the modern oral cavity. In modern times, wisdom teeth often pose various challenges due to insufficient spacing in modern jaws. Unlike our ancestors, humans have evolved to possess smaller jaws due to

expansion in size of human brain making the eruption of wisdom teeth slightly implausible. Either wisdom tooth are too big for the size of the jaws that modern humans possess or the jaws themselves are just too small thereby leaving no room for the wisdom teeth to erupt. In many of the lucky ones who have the perfect sized jawbones or one of those whose wisdom teeth come in healthy and properly positioned thereby helping in supporting facial structures, preventing sagging or unflattering appearance, then there's no room for any of the complication to occur in relation to the wisdom teeth

eruption. In former ones, wisdom teeth are more likely to get trapped beneath gums or bone and pushed up against the anteriors thereby causing 'impaction' or 'crowding' respectively.

Based on the position where the tooth is within the jaw, levels of impaction are as follows:

~ Soft tissue impaction: tooth is out of the bone but gum is still covering it.

~ Partial bony impaction: tooth is partially erupted out of gums, but a part of it remains in the jawbone.

~ Complete bony impaction: when the jawbone completely encases the tooth.

Such impacted wisdom teeth can be chronically contaminated with infection associated with certain bacterial species like *Porphyromonas gingivalis*, *Tannerella forsythia*, *Prevotella intermedia* etc. which can cause several periodontal infections, tooth decay and inflammation. Since they're situated in utmost posterior region of the oral cavity partially erupted or completely trapped underneath in the gums, it is difficult and several times almost impossible to maintain them clean. Even if wisdom tooth is completely erupted, it is situated so far in the mouth that making it very prone for entrapment of food, debris etc., leading to plaque, caries and several gum diseases.

V. PROS & CONS

Wisdom tooth surgery is the most common ambulatory procedure done by the oral and maxillofacial surgeons. Surgical approaches for the removal of wisdom tooth have been published since the 20th century. If they aren't giving any pain or discomfort then not getting them removed is not bad at all, particularly if they're healthy, in the right place and having enough room for erupting without affecting neighbouring molars, providing that they're being monitored at a certain period of time along with regular dental check-ups.

VI. CONCLUSION

Wisdom teeth surely carries a rich historical and cultural significance. From ancient Greek philosophy to traditional medicine folklores, wisdom molars have been associated with the transition to adulthood and to more wise phase of human's life. As their historical significance seems getting diminished, the challenges they present in modern dental world continue to drive the need for extraction in several cases. Wisdom teeth and the symptoms associated with them reminds us to get out dental check-up done every once in a while in

order to combat every major and minor associated problems.

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