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Review Article

Important Considerations Should Be Evaluated for The Decision to Extract Teeth That Can Be Made in The Context of Orthodontic Treatment

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Abstract
In this research, the bad effects of tooth extraction were studied and discussed in the context of orthodontic treatment, which can occur disastrously at the level of the gums and the smile in terms of the extraction of black triangles and the abuse of the aesthetic of the smile, and then in terms that the extraction initially reduces the size of the basic structure by a third The lower part of the face and consequently, as well as disastrously, affects the growth of the face and the associated functions of breathing, swallowing and straightening the neck. As well as in some way on the general physical and psychological state Which makes the above important and clear considerations that must be taken wisely into account in order to move away from that decision and in light of the adoption of alternative and more beautiful solutions that depend on the beginning of the four-dimensional diagnosis and treatment that takes into account the associated functions and in a way that returns them to what was programmed to get higher. The results are the most stable in a way that the tooth can be used as a complementary and supportive unit naturally and better for gums, smiles, growth, function and cellular regeneration.

Key Words: Tooth Extraction, Smile, Gum Degeneration, Breathing, Orthodontic Treatment

Introduction
In orthodontic treatment, the diagnosis is often focused on:
The two-dimensional and three-dimensional at best (There are three traditional dimensions of orthodontic diagnosis--transverse, vertical, and sagittally as anterior-posterior of the maxilla and jaw without reaching the four-dimensional diagnosis or as functional movement over time (as a 3D object that can move in this reality within a function it was originally programmed for [1, 2].

On the part of the teeth and jaws the dental and jaw part without effective consideration of the fact that this group is an integral part of larger groups, in which the face, head and neck are included, and implicitly the associated functions of breathing, swallowing, eating, neck tilt and Other [3].

To the extent that judgment is rushed to the decision of extraction, mostly only by looking at the smallest part where the teeth and jaws are (for example, by adopting the value of the dental alveolar deficit) without paying attention to the bad effects of that extraction, which can occur disastrously at the level of the gums, smile, face and functions associated with the general physical and psychological condition [4, 5].

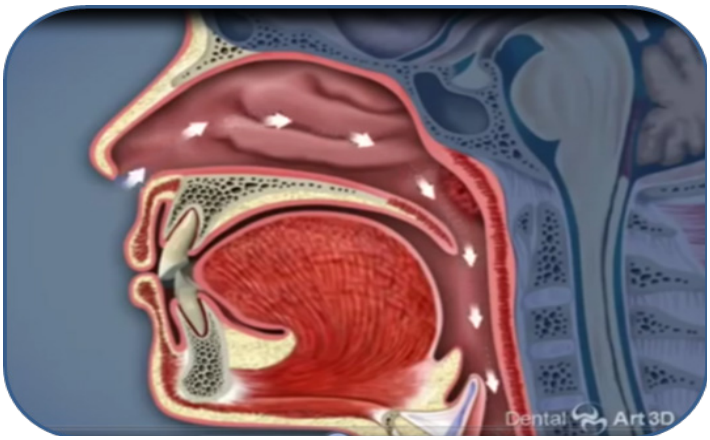


Figure 1: Normal Breathing Process

First: At the level of the gums and the smile
Placing the gums in the smile plays a major role, however, we overlook the negative impact of extraction on the level of the supporting tissues, especially when we are surprised that with this extraction we are contradicting the work of a specialist in the field of

supporting tissues concerned with the so-called re-manufacturing of the gingival papilla, [6]. Which stems from the concept that reconstructing the gingival papilla The gingival papilla requires re-evaluation by squeezing it with the adjacent teeth according to orthodontic ratios between those teeth on both sides of the papilla, between the points of contact and the level of the apex of the socket between the teeth and so on) as the following picture [7, 8]

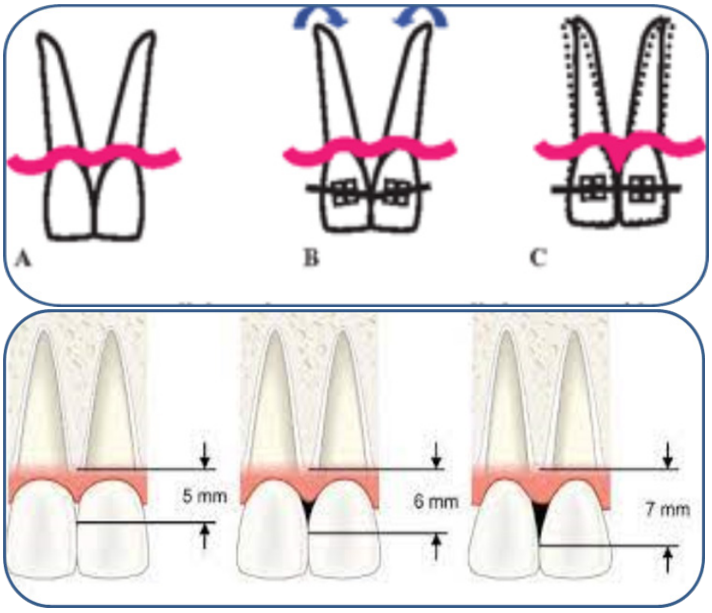


Figure 2: Black triangles in the gums and the reconstruction of the gingival papilla

We find that, in sum, by this extraction, we contribute as much as the random demolition of these gingival papillae, the effects of which will often appear with time, even if initially delayed Which will ultimately affect the design of the smile on the level of consistency of the edges of the gums at the necks of the teeth [9-11].

We will also find that the smile design in general with the presence of the first and second premolars is more beautiful, harmonious and harmonious than the smile design in the absence of the first premolars due to loss or extraction in the course of orthodontic treatment as shown in the following picture:

Figure 3: smile aesthetic design

So how if I add at this level the above that extraction contributes to the demolition of the structure of the gingival papilla? [12, 13].

Second: On the level of facial growth and functions

Ideally, both the teeth and jaws form the basic structure of the lower third of the face, and therefore any increase or decrease in the size of this structure will also be reflected in some way as an increase or decrease in the size of the lower third of the face, and it will also negatively contradict the harmony of the smile [14 ,15,16,17]. This is evident over time on vertical growth in the case of the erosion of the dental humps, for example as the following picture:

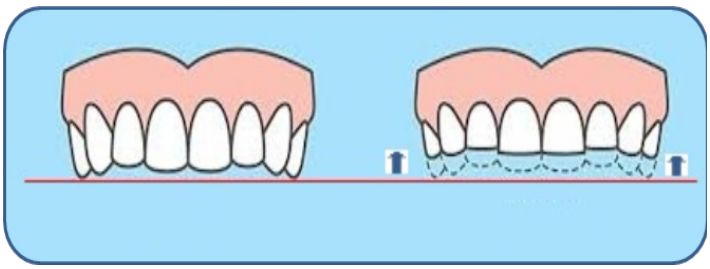


Figure 4: The effect of pulling the dental humps on decreasing the vertical dimension of the lower third of the face

Also, with time, there will be a decrease, at least sagittally, in the growth of the size of the alveolar bone structure, especially when a tooth or a premolar is missing or extracted. Judgmentally, a sagittal deficiency will be reflected in the growth of the size of the structure on which it is based [18]. as shown in the following picture:

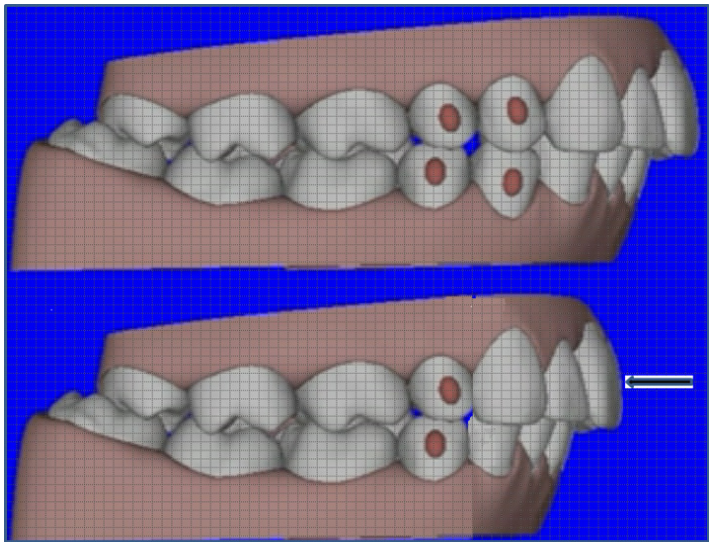


Figure 5: Decreased length of sagittal structure with premolars extraction

Likewise, in the case of an arc-shaped position of the teeth and jaws, this will also reflect a tangential decrease in the growth of the width of the face in this lower third [19]. as the following picture.

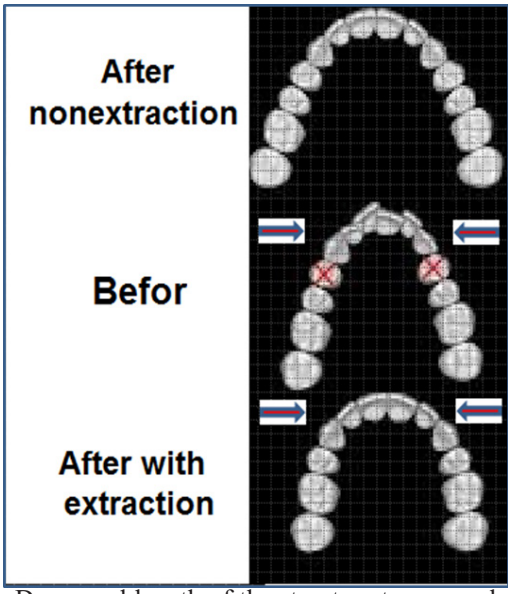
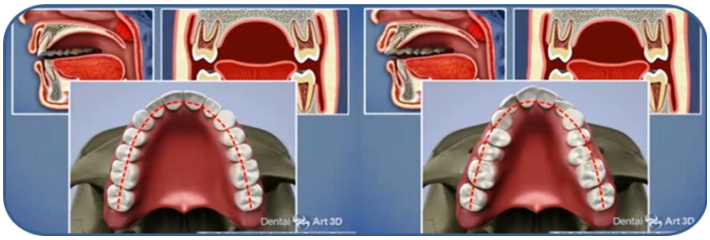


Figure 6: Decreased length of the structure transversely with the extraction of premolars

As well as at the level of associated functions, and based on the above, the lack of this structure transversely and sagittally, we will find that it is reflected in a decrease in the width and length of the maxillary sinus in terms of being like a palate dome that forms the base of the maxillary sinus, and the opposite is true [20, 21]. Which must have a negative impact on the respiratory function in This part of the respiratory system [22, 23].

Likewise, in the case of the extraction of premolars, for example, we will find that the place in which the tongue can rest will be reduced, which may force the tongue to fall into a lower position due to the small space for it in the dome of the palate [24]. Which must negatively affect in some way the gustatory functions of the tongue. As well as participating in swallowing and eating and as part of the digestive system.

We may also find that when these two previous problems come together and there is a disability in the function of the respiratory tract, this will push the person to open his mouth for the help of mouth breathing, and to a degree with time we will find that the tongue is due to its decline resulting from oral breathing and the decrease in the size of the palate dome He will take a posterior position that will often cause, with time, a narrowing of the oral respiratory tract behind the base of the tongue [25]. which may force him to wrongly tilt the head and neck forward until that airway widens a little, which may result in muscle spasms in the neck leading to nervous pain in the neck and head. as the following picture. [26-28].



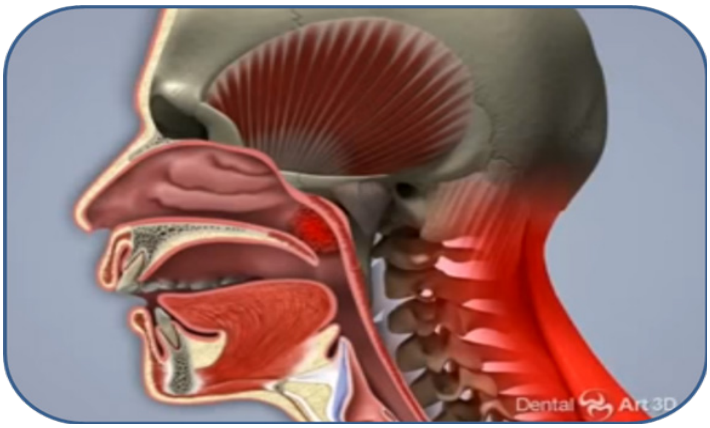


Figure 7: Tongue drop and back, causing shortness of mouth breathing, forcing the person to tilt his neck to open the airway

Third: On the level of the general physical and psychological condition

From the foregoing, we will find that this respiratory problem resulting from the narrowing of the base of the palate dome must, as part of the breathing process, have a negative impact on the whole process, and therefore this ultimately reduces the respiratory efficiency, which means that the extraction has a role in this, which may act as a domino [29]. Likewise, with the problem of the tongue, it will affect some deficiency of digestive effectiveness [30, 31]. Likewise, with the problem of the neck, it will affect some deficiency of neurological activity [32].

therefore, at the level of the psychological state, if there is psychological trauma towards the extraction of a tooth for which there is no hope of medically correcting [33]. how will the psychological trauma towards the extraction of a healthy tooth on the pretext that this is necessary in the orthodontic treatment, then how is the psychological trauma of the patient if the decision is taken in the context of treatment Then it was proven to him that plucking contributes disastrously to all of the above, although there may be an alternative solution, even more beautiful, initially, it depends on the four-dimensional diagnosis and the treatment that takes into account the associated functions and in a way that brings it back to what it was programmed for to get the highest and most stable results [34-37].

The tooth can be used as a complementary and supportive unit naturally and better for the gums, for the perfect smile, for the growth of the surrounding facial structures and for the functions associated with them, and even for the general physical and psychological condition, to the extent that the tooth itself has become a small bank of stem cells that can Contribute to supporting cellular regeneration, [38-41].

The previous considerations must be taken into account in order to avoid taking the decision to extract teeth in the context of orthodontic treatment, and to the extent that these mentioned considerations may be a reason in the near future for legal issues, especially if an alternative solution is found.

Conclusion

To obtain in the context of orthodontic treatment the best aesthetic results and stability and stability on the level of aesthetics of smile design, gums, facial growth, aesthetics and health of functions, we must, on the one hand, move away from the decision to extract teeth based on its negative effects that were mentioned in the context of this research.

On the other hand, basically: relying on alternative solutions that rely on four-dimensional diagnosis and treatment that takes into account the treatment of associated functions

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