

### **Case: Fluorosis treated with Microabrasion**

A 19-year-old male presented with healthy dentition but was not happy with the aesthetics of his teeth. Both maxillary and mandibular anterior teeth displayed white and brown mottling due to enamel fluorosis. The patient desired removal of the affected areas, and a whiter, brighter smile.

On asking the detailed history patient said that his teeth has the similar appearance for as long as he can remember. He doesn't remember taking any fluoride supplements but his mother told that he always brushed with adult tooth paste after the age of 3 and sometimes he would swallow it.

I gave him some treatment options including bleaching, microabrasion, veneers and/or crowns.

Patient wanted to go for enamel microabrasion being the most conservative treatment option. Patient was not able to afford any veneers or crowns.

The treatment protocol was as follows:

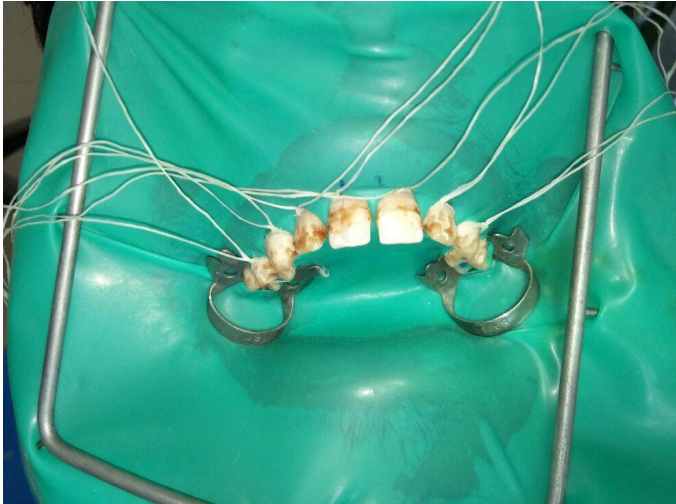
- ✚ To begin with I started with scaling and polishing in the first visit so remove any extrinsic stains or any calculus. The appearance got slightly better.
- ✚ After one week I recalled him for enamel microabrasion.
- ✚ I began with placing the local anesthesia in Maxilla and Mandible. Then I placed the rubber dam to protect the mucosa from the phosphoric acid. (I used 35% phosphoric acid). I used micro brush in a light motion for deeper penetration of phosphoric acid in the areas with deeper stains.
- ✚ After rinsing the etchant off carefully from each tooth I applied pumice paste on each tooth in 1mm thickness and repeated the same procedure with the rubber cup, this time with slight pressure.
- ✚ After completing this procedure on each tooth, I carefully rinsed and dried the teeth to see the end result and showed it to the patient if he was happy with the result.
- ✚ I performed two more microabrasion treatments in the same sequence until the patient was happy with the results. (Altogether 3 applications).
- ✚ I then polished the teeth with silicone polishing bur followed by polishing paste.
- ✚ After the microabrasion treatment was done topical fluoride gel was applied and patient was instructed not to eat or drink for 40 min.

The patient and his mother were very happy with the end results.

*Pre & Post treatment results are as follows:*



**Figure 1 Dental Fluorosis**



**Figure 2 Rubber Dam Application**



**Figure 3 Stains removed**