|  |
| --- |
| **Name:** |
| Mansour Mohammed |
| **Group:** |
| 4A-5 |
| **Basic Science Question:** |
| What are the periodontal fibers and what do they do? |
| **Report:** |
| Our case was about a patient who had an impacted canine. This means her canine is not aligned properly and there isn’t adequate space for it to erupt in the right position. In order to shift the canine back into its proper place, the rest of the teeth must be aligned through orthodontic treatment. It is important to understand the science behind periodontal fibers as they are crucial in the teeth movement process.  Periodontal fibers are dense fibrous connective tissue structures that consist of collagenous fiber bundles. They support the teeth in the socket and allow the teeth to withstand chewing forces. Compression of the periodontal ligaments leads to bone resorption and tension of the ligaments leads to bone formation. Using orthodontic treatments, the teeth can remodel and shift to the proper place by causing tension and compression of the targeted periodontal ligaments.    Impacted canines require complex orthodontic mechanisms to align the canine into the arch. Surgical exposure of the impacted canine followed by orthodontic traction is applied to guide the canine and align it into the arch. It is important to understand the science of periodontal ligaments when implementing this procedure. |
| **References:** |
| Newman, Michael. Clinical Periodontology. Saunders; 13th edition (July 31, 2018) |