Maxillary central diastema in a child with deciduous or mixed dentition is common and normal, owing to the growth and development of the anterior segment of the upper jaw. However, if the central diastema persists after the permanent cuspids have erupted, the dentist should clarify its aetiology and establish a conforming treatment. This report discusses a case in a 13 years old girl, in the beginning of permanent teeth period, with a central diastema due to a high attachment of the maxillary labial frenum. Cross bite anterior and midline shifting were also found in this patient. The treatment was frenectomy followed by orthodontic treatment. The closure of the diastema took place after one month of treatment. The orthodontic treatment has been continued to achieve the correct occlusion.