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Short Communication

### BAND AND LOOP REDEFINED – THE NIMS MODIFICATION

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#### ABSTRACT

This manuscript explains a modification of commonly used space maintainer, band and loop, which might have to be done in a specific case scenario as explained.

**Keywords:** Band and loop, space maintainers, pediatric dentistry

#### INTRODUCTION

Band and loop is a very commonly used fixed type of space maintainer. This space maintainer is known for its versatility. It can be used for either of the arches in both unilateral and bilateral cases.

The conventional design involves a “band” on the distal abutment tooth and a “loop” soldered to this band extending till the anterior abutment. The loop is kept at<sup>1</sup> or just below the contact area of the anterior abutment but not impinging on the gingiva. Over the period of time many modifications of this widely used appliance have been published, like - reverse band and loop<sup>2</sup> (for guidance of first permanent molar), long band and loop, crown and loop (when the distal abutment has a stain less steel crown), band and loop over the crown, bonded band and loop<sup>3</sup>, band and bar etc.

##### The NIMS modification

While fabricating the loop of this appliance, occlusion is the key to success. That’s why we always recommended making both arch impressions to have models of the same. However in some cases (especially in long standing loss of upper first primary molars of complete primary dentition), the primary canine occludes with opposite arch first primary molar such that the mesio-buccal cusp and mesial marginal ridge of first primary molar almost touches the ridge in the space created by loss of the tooth. In such cases, loop of the appliance has to be modified and one of the arm has to be removed (**fig. 1**) to create space and allow proper occlusion.



Figure 1: Shows the band and loop with NIMS modification



Figure 2: Shows lack of occlusion using the conventional loop design



**Figure 3: Shows proper occlusion after modifying the loop  
(Parents did not give consent for treating the patient's other affected  
teeth)**

**Figure no 2** shows that patient occlusion does not allow both the arms of the loop. After removing the palatal part of the arm, proper occlusion was achieved. An important point to remember in cutting the arm is, maximum part of the distal surface of canine should be embraced so that the stability of the appliance get least affected. Also the cut end has to be smoothed and polished well to avoid any sharp edges. After modifying the loop, proper occlusion was obtained.

## CONCLUSION

Band and loop, being a very commonly used space maintainer has many indications. However, in some cases, due to certain kind of occlusion (usually in cases of long standing tooth loss in primary dentition) both the arms cannot be incorporated. This paper suggests a modified band and loop to be used in such cases.

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