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(B (C . (DIATECH ,Dental ) Superfine )sof-lex Instrument ,Swiss (1958 SF 3M ESPE (D . (A: (B . ) (A: (B. **(**B . (B USPHS Ryge & snyder :( ) (A: (B. Ryge & Snyder Alpha: Restoration without faults Bravo: Minor defects, restoration should be observed (C. Charlie: Major faults, restoration should be replaced within the next few weeks. Delta: restoration must be renewed at once

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Ryge & Snyder Alpha No defects Single pit **Bravo** % Marginal discolouration Discolouration of the restoration surface Ditching Charlie Missing proximal contact Significant wear Delta Fracture of the restoration Secondary caries Tooth fracture Pulpitis/persistent postoperative pain Loss of restoration Renewal for unknown reasons В ). D Ryge & . ( ) snyder % / Ryge & Snyder USPHS ( (Alpha) A (Bravo) В C (Charlie)

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Clinical evaluation of classII combined amalgam-composite restorations in primary molars (Pilot study)

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#### Abstract

#### Introduction:

The purpose of this study was to assess the influence of a thin layer of amalgam placed on gingival floor of class II composite restorations in primary molars, on the clinical and radiographic findings and esthetic appearance of these restorations.

# Materials & Methods:

In this study 30 class II cavities were prepared in primary molars of 18 patients aged 6 to 8 years old (14 restorations in control group and 16 restorations in case group). In control group all cavities were filled with posterior composite resin incrementally after total etching and using Scotchbond MP as dentin bonding and in the study group a layer of 1 mm thick amalgam was condensed on the gingival floor of the proximal box and then composite material was inserted. The restorations were evaluated at base line, one week, one month and six months later and also bitewing radiography was taken at base line and six month later.

## Results:

Success rate of restorations regarding anatomical form, marginal discoloration, and color match was 100% in both groups but with regard to marginal adaptation the rate was 84/6% in control group and 86/6% in study group. None of the patients complained of any pain or discomfort .No secondary caries and no radiographic pathological evidence was observed.

## Conclusion:

If long-term in vivo studies and further in vitro studies prove success of the class II combined amalgam-composite restorations, they can be recommended for primary molar teeth and therefore one can enjoy good esthetic of composite material and proper seal of amalgam simultaneously.

Keywords: Restorations, composite-amalgam, primary molar teeth \* Corresponding Author

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