

Summary

Aim

The aim of the first part of this study was to compare overhang filling prevalence in our patients with literature data. In second part of study we evaluated disadvantageous approximal morphology influence at creating of overhang filling.

Materials and Methods

In the first part of study 316 Hradec Králové high school students were examined (151 men a 165 women).

In the second part of our study we evaluated 110 approximal fillings made in patients of Dental Clinic Teaching Hospital Hradec Králové between September 2000 and April 2004. These fillings were evaluated on X-Ray according the criteria from the first part of study.

Results

Overhang filling prevalence

In 316 students 9782 approximal sites were evaluated. 2599 sites were unable to evaluate. Remaining 7183 sites were treated with filling on 410 teeth, one tooth was restored with full cast crown. From 410 fillings, only 64 (16%) was graded as „correct“.

The influence of approximal tooth morphology on creating overhang approximal filling

110 approximal fillings were examined and evaluated. 36 approximal sites were graded as disadvantageous (with central depression) and 74 as advantageous (without central depression). Statistical analysis proved no significant ($p=0,225$) relationship between approximal tooth site morphology and increased risk of overhang approximal filling creating.

Conclusions

Overhang filling prevalence, found in literature articles is much higher than we obtained in our study. This could be influenced by low age of our patients and easy situations treated.

Without doubt remains that careful and high quality treatment should drastically decrease the percentage of overhang filling and its long time detrimental effect on surrounding tissues.

Despite of overall careful treatment a few small overhang appeared. Purposeful finding of these mistakes, check up the fillings (with bite wing X-Ray imaging) and removal of the overhangs is necessary.