Furcation lesions are a common symptom of moderate or severe periodontitis. Making an accurate diagnosis and conducting a proper treatment is a challenge in dentistry. Analyze the competence of the Bulgarian dentists regarding the diagnosis and treatment of furcation lesions.

Material and methods
An anonymous survey among 150 dentists about the knowledge and the use of furcation lesions diagnostic methods and periodontic approaches was conducted. The statistical analysis of the survey was performed with SPSS 13.0 for Windows.

Results and discussion
From this survey it was found that the majority of responding dentists have periodontal probes (64.4%) and 35.6% have none (Fig. 1). It is notable that the majority of those who do not have a periodontal probe have considerable experience (over 20 years) – 70.8% (Fig. 2). From the others, who have periodontal probe, most of them have senior experience and fewer are those with experience of over 20 years (p < 0.05). As for the specialised furcation probe Naber's, only 17.4% of dentists have one. There is a statistically significant difference between the dentists with experience over 20 years and those under 20 years, in favor of groups with experience below 20 years (p < 0.05).

Over 2/3 of respondents diagnosed furcation lesions by a combination of clinical and radiographic methods, giving rise to a more accurate diagnosis (Fig. 3).

These facts are related to the expanding and deepening of the teaching of periodontology recently and in regard to the creation periodontology departments at Bulgarian dental faculties in medical universities.

A good trend is that for the last year about half (44.6%) of dentists have visited a course or read literature about the diagnosis and treatment of furcation lesions.

A large part of the respondents, 77.2%, perform nonsurgical therapy – clean and plane the root surface in the area of the furcation lesions. 32.9% of them use only ultrasound, while 36.9% of respondents do combined cleaning (ultrasonic, universal and/or specialized curette).

However, regarding specialised treatment, the majority of respondents are not familiar with the indications and effectiveness.

For Class I furcation lesions, only 32.9% of the dentists would employ odontoplasty, and according to half of all respondents (43%), preparing the teeth with Class I furcation lesions should not be consistent with the morphological changes.

For Class II furcation lesions – only 26.2% would like to combine methods - nonsurgical treatment and regenerative therapy or only regenerative therapy.

For Class III furcation lesions – only 1/3 of the respondents would perform resective periodontal surgery, odontoplasty, or extraction (Fig. 4). Only about half (51%) of the dentists recommend personal means to clean the furcation lesions of their patients, which are important in the maintenance phase of treatment.

Conclusion
Additional training for the dentists to establish the exact diagnosis and treatment of furcation lesions is necessary. This will improve the entire dental treatment.

References

Fig. 1 and 2 Present the statistical data of the respondents regarding the use of periodontal probes.

Fig. 3 Methods for diagnosis of furcation lesions.

Fig. 4 Guidelines for specialized treatment of the three classes furcation lesions based on the correct answers from the respondents.