

microscoping and morphological analysis with photographing.

3. Results and Discussion

Regarding the size, calcifications show a wide range of variations. The findings show values smaller than 1 micron, up to 1cm measured per sample, with continuous areas of calcifications which fill in almost the whole pulp, in a longitudinal direction. The transverse section is within the limits of 20 to 200 microns, whereas the longitudinal section is up to 500 microns.

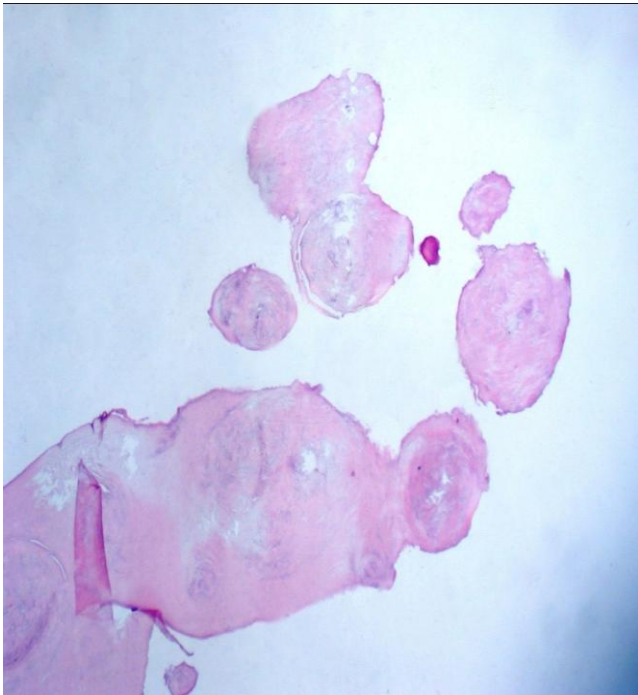


Figure 1: HE colouring (magnify.10x4) formations of decalcified spherical pulp stones, dentinal composition

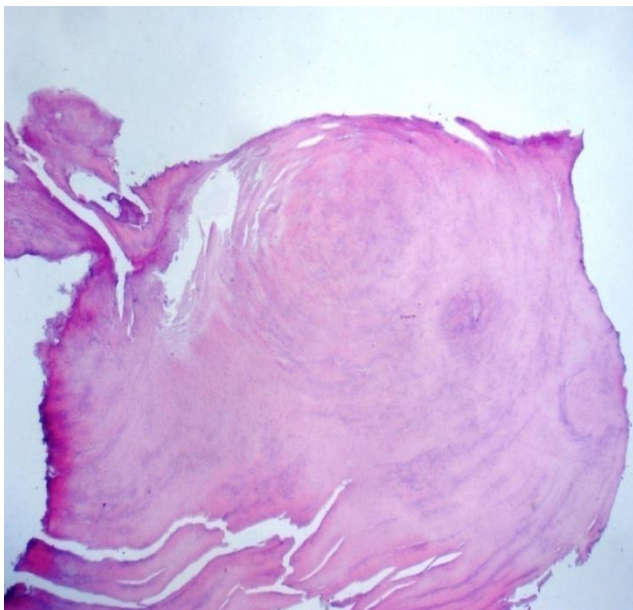


Figure 2: HE colouring (magnify.10x4) formation of decalcified spherical pulp stones, dentinal composition

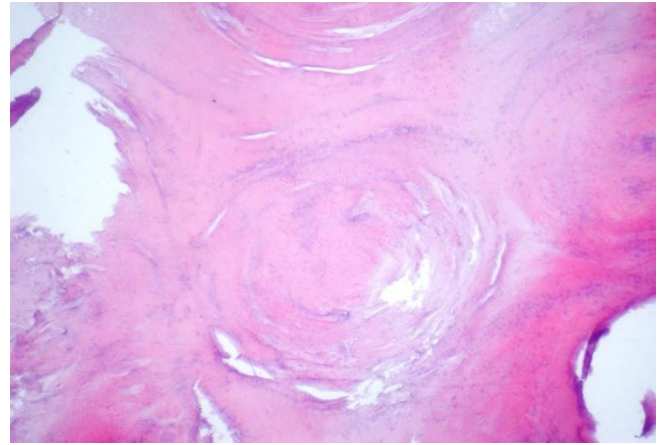


Figure 3: HE colouring (magnify.10x10) formations of decalcified spherical pulp stones, dentinal composition, dentinal tubules itself partially with radial disposition, partially with anarchic disposition

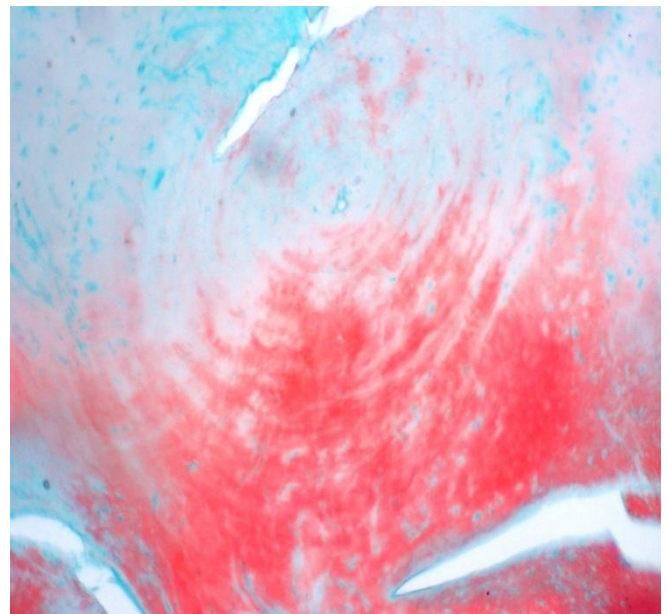


Figure 4: Masson trichrom colouring (magnify. 10x20) – of the figure is visuelisation ratio of predentin and dentin, predentin colouring green, ripe dentin colouring red

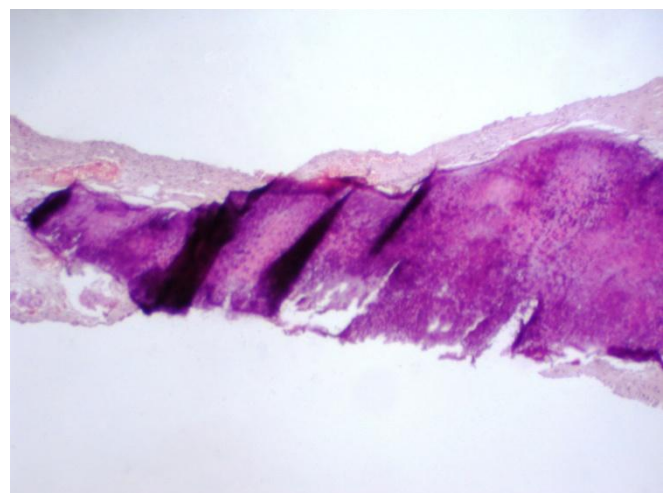


Figure 5: Colouring according to HE, zoom of 10 x 4, formation of dental calcification, denticle with fine granulated structure, the size of which being such to occupy

the pulp almost across all its width and along its length.
Visible congested blood vessels

Literature is rich with descriptions of dental calcifications. The greatest attention is paid to the prevalence of denticles. Pulp stone was seen more often in the 41-50 years age band, in molars and in teeth with chronic periodontitis but less often in teeth with abrasion. In addition, coronal and free form of pulp stone were more popular [4]. The incidence of pulp stones was found to be 15% in a Turkish population [5]. The studies on the structure, the composition and the size are not in a large number [6], which leaves available the possibility to make tries to define it in a more accessible manner, as an opportunity to clarify this dental entity which is present in the everyday casuistics, but does not appear to always be detected.

Structurally, pulp stones can be classified as true or false, the former being made of dentine and lined by odontoblasts, whereas false pulp stones are formed from degenerating cells of the pulp that gets mineralized [7]. According to Smith There is a continuous deposition of secondary dentine throughout the life of the pulp which generally reduces the volume of the pulp and the root canals. Secondary dentine is deposited at a rate of approximately 1-16 microns per day [8]. Structural changes with age include a decrease in the number of blood vessels, 4 nerves and pulpal cells with an increase in fibrous components [9]. In posterior teeth, there is an asymmetric deposition of secondary dentine with the greatest increase on the floor of the pulp chamber, leaving the horns of the pulp behind [10]. In anterior teeth most of the dentine deposition occurs on the lingual wall of the pulp chambers as a direct result of masticatory forces, followed by deposition on the incisal floor of the pulp chamber [11].

Robbins LS. In year 1979 divided the dental calcifications into: pulp stones and diffused calcifications. Both types of calcifying bodies in the dental pulp are described by Moss Salentijn and Klyvert in year 1983. According to them, denticles according to their structure are divided into: real and false denticles. According to these authors, there exists another histological division i.e. denticles that have central gap which is filled with epithelial remains, wrapped up peripherally with odontoblasts and pulp stones wrapped up with compact degenerative masses of calcified tissues. With this study are confirm that regarding the size, calcifications show a wide range of variations [7].

4. Conclusions

With this study are confirm that regarding the size, calcifications show a wide range of variations.

References

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