## INTERNATIONAL CONFERENCE

Dehli, India, 2025 https://eijmr.org/conferences/

## METHODS OF TREATMENT OF INFLAMMATORY CHANGES IN THE AREA OF PERIAPICAL TISSUES (LITERATURE REVIEW)

Juraeva N.I.

Andijan State Medical Institute

**Abstrac:** Calcium-containing preparations occupy an important place in modern dentistry due to their unique properties, allowing for successful treatment of both pulp tissues and periapical tissues. The basis of the action of these preparations is the formation of calcium hydroxide (Ca(OH)<sub>2</sub>), which exhibits reparative and antibacterial properties. However, if accidentally released into the surrounding vital structures, it can cause serious harm, lead to thrombosis if it enters the blood vessels, damage the connective tissue and cause skin necrosis. Modern calcium-containing preparations contain additional components, such as silicon hydroxide, strontium ions, phosphates, which enhance their biocompatibility and clinical effectiveness. Also, drugs with prolonged action are being developed, which simplifies their use in dental practice. The article presents modern literature data describing the main mechanisms of action of drugs for temporary obturation of root canals and the most common methods of non-surgical treatment of periapical changes.

Key words: chronic periodontitis, obturation, root canals.

**Purpose of the study.** To study the literature data on the effect of drugs for root canal obturation on the stimulation of reparative processes in the periapical tissues.

**Materials and methods.** The review and analysis of literary sources was carried out using keywords on the electronic resources of the Scopus, Web of Science, MedLine, The Cochrane Library, and Russian Science Citation Index (RSCI) databases. Foreign and domestic sources were used to write the review article.

**Results.** The use of calcium-containing pastes (for example, calcium hydroxide) helps maintain the viability of the pulp, preventing the development of irreversible changes. The introduction of drugs for temporary obturation of root canals helps to eliminate the infectious process, create a barrier to the spread of bacteria and stimulate reparative processes in the periapical tissues. Calcium hydroxide helps in the formation of a dense apical plug in the treatment of immature roots. In the treatment of perforations and root resorptions, calcium preparations help to close defects and prevent tooth loss.

**Conclusion.** There are various approaches and methods for the treatment of destructive forms of chronic periodontitis, and the results of traditionally used treatment are not always successful. Thus, this problem remains relevant and not fully resolved in dentistry.