Efficacy of LATENSIN 4X in Inflammations of Dental Origin

Case Report

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The report concerns the treatment of perimaxillary inflammation of dental origin with LATENSIN 4X. The medically active substance of LATENSIN 4X is a non-pathogenic strain of *Bacillus cereus*. It increases the activity of phagocytes and T-lymphocytes which play a significant role in the regeneration of the immune system.

The healing characteristics of hay extract have been known for a long time, but nobody connected them with the presence of *Bacillus species*. Miecznikow described the restraining influence of anaerobes towards streptococci, staphylococci, salmonella and tubercle bacillus. Rau emphasized the bactericidal activity of the hay microorganism. Homeopathic drugs stimulate the specific and non-specific defence mechanisms of the body, which give protection against bacteria, viruses, toxins, increase the level of interferon and lizozyme, assist the effect of prostaglandines and increase the non-specific humoral response.

In dental practice, gangrenous teeth are often accompanied with trismus, which restricts jaw opening. It is caused by general psychogenic and neurogenic disorders and local factors which lead to contracture of masseter muscles. Trismus is not a contraindication with the extraction of a tooth.

As yet no information referring to this subject is available in dental literature.

**Case report**

B.M., a 23-year-old man (outpatient No. 20419/04) consulted the Department of Dental Surgery of the Medical University in Łódź due to a swelling of the mandibular angle and first-degree trismus. The patient stated that the symptoms began a few days before, and therefore he had been treated with antibiotics (Dalacin C, Augmentin). The patient’s mother noted that he had lost 30kg (slimming diet) in weight during the last 3 months because he intended to serve in the Army in Iraq. The present body weight was 97kg at a height of 193cm.

Clinical examination determined a tumor, 2x3cm, of the left mandible without fluctuation, central emollition or pain on palpation. (figure 1). The patient’s general state of health was good; normal temperature, puls 96/minute and blood pressure 135/90 mm Hg. The cervical and submandibular lymph nodes could not be palpated. First-degree trismus made the intraoral examination impossible, therefore a panoramic X-ray was carried out which showed a crown fracture of tooth 37 with gangrenous pulp and periapical lesions. The patient was informed of the necessity to remove the affected tooth in spite of trismus, to which he gave consent.

Using the gag, perineural anesthesia was performed with 2% lingocaine. Then a mucoperiosteal flap was cut, the lamella of the bone was taken out, radixes were separated and removed. Then the periapical lesions were curettaged and the wound was stitched with knot sutures. Following the extraction, the patient was able to open his mouth one finger’s width. A thin-needle aspiration biopsy was carried out and the cytologic examination confirmed inflammation.

The patient approved to the following protocol for treatment: 3-4 intramuscular injections with LATENSIN 4X, one every 3days. After desinfecting the skin of the face with 0.5% solution of chlorhexidine (figure 2) the remedy (1 ampule for one injection) was injected i.m. to the mandible angle. During the treatment period, the healing process and the patient’s condition were determined. The edema of the tissues decreased after the second injection and jaw...

**Fig. 1. Inflammation of the mandibular angle region on the left side. Trismus 1°**
opening increased (1.5 finger). After three injections, on the 10th day of treatment, the inflammation had subsided (fig. 3) and jaw opening was normal.

Discussion

Acute dental inflammations often cause sudden trismus of the muscles that lift the mandible, including the masseter, temporal and pterygomedial muscles. Differential diagnosis is necessary to distinguish the dental problems from others. The most common causes are teeth radixes left in the jaws, teeth with gangrenous pulp and periapical lesions, as confirmed by our case report.

According to Gajewski the treatment of trismus caused by acute inflammation is usually causal. If possible, the affected tooth should be extracted. In this case, the operation was carried out despite first-degree trismus.

According to other authors, antibiotics and sulphonamides are applied in the treatment of inflammations of dental origin; e.g. Lewandowski et al. administered Dalacin C to 67 patients – 45 men and 22 women; 36 of whom were hospitalized and 31 were treated as out-patients. The authors evaluated the efficacy of this drug with 86%. 13.4% of patients required a change of antibiotics. Dalacin C is effective with anaerobians.

Fliegel et al. used parenteral stimulus treatment, mostly as intramuscular injection of stimulus medication. They studied the effectiveness of Panodine, Dibota, Distreptase or Biostimine on activating fibrinolysis, proteolysis and immune response.

In the case report the patient suffered from a gangrenous tooth, causing trismus and inflammation in the mandibular angle region. After the extraction of the tooth three intramuscular injections of one ampoule of 1ml LATENSIN 4X were administered at intervals of three days. LATENSIN 4X had a distinct healing effect and caused remission of trismus, edema and inflammation.

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An extensive bibliography is available from Semmelweis.

The revised translation has been approved by the authors.