

3. Results

The MIIA technique has been used on a total of 16 patients (26.2%), where successful dental extraction and drainage of the submandibular lodge was accomplished, all without a cervicotomy. Drainage was removed on the third post-operative day. On average, removed teeth were two per patient and the inferior are the most frequently extracted, especially molars 3.6, 3.7, 3.8, 4.6, 4.7, and 4.8. The patients who underwent MIIA surgery all perfectly healed and did not suffer from relapses during the follow-up. We have also evaluated and kept track of the drug therapy administered during hospitalization. Before admission, 34 persons were taking antibiotics, generally penicillin, without any association to specific gram-negative coverage and often without proper dosing and application. After admission 86% of the patients were treated with double antibiotic therapy in order to cover the broadest spectrum of aerobic and anaerobic bacteria, alongside with steroids to fight inflammation. The duration of treatment varied from five to ten days, and in only two cases was extended up to 21 and 25 days. The most frequently isolated germs in neck phlegmons and abscesses of odontogenic origin are predominantly Gram-positive organisms, such as staphylococci and streptococci, and lesser Gram-negative anaerobes deriving from periodontal bacterial flora [9] (Figure 4). Our protocol includes penicillin and cephalosporine or, in case of allergy, macrolides that have been shown to be effective against gram-positive organisms, always associated with a broad gram-negative coverage. We usually adopt the following scheme: amoxicillin 875 mg + clavulanic acid 125 mg or piperacillin 2 g + tazobactam 250 mg every 8 h, plus metronidazole 250 mg every 8 h or clindamycin 150 mg every 6 h. Ceftriaxone 1 g every 12 h could also be used instead of penicillin. Clarithromycin 500 mg every 12 h is used as an alternative to penicillin or cephalosporine when history of allergy is recorded. Betamethasone 1 mg per 10 kg is given to contain and reduce the inflammatory process and swelling. During hospitalization drugs are given intravenously followed by oral administration after discharge for at least seven days.



Figure 4. Sample of purulent material from the abscess.

4. Discussion

The submandibular lodge (Figure 5) is a head and neck fascial space and derives from parotid fascia. In coronal section, it takes the shape of a triangular space showing three sides.