

ENDOPHTHALMITIS AND OCULAR EVISCERATION CAUSED BY A RARE *CAPNOCYTOPHAGA SPUTIGENA* INFECTION

Introduction

Capnocytophaga spp are gram-negative, capnophilic, facultative anaerobic and slow-growing bacilli; rarely identified as infection agents. *Capnocytophaga sputigena* is a commensal microorganism of the human oral cavity. Despite its apparent benignity, there are reports of different types of infection caused by this agent, including eye infection. Most of the reports mention immunocompromised patients.

Clinical Case

The patient was a 68 years-old male, with cerebrovascular disease and pharmacologically immunosuppressed due to rheumatoid arthritis (lepicortinol 5 mg id, and methotrexate 15 mg weekly). During the previous 2 months he was being affected by a left corneal ulcer. Last check-up with his ophthalmologist assistant occurred one month prior to the acute clinical presentation. No other relevant background was registered. The patient was admitted at our hospital in an emergency context, due to left visual impairment. Left eye examination revealed hypopion, corneal ulcer, eyelid edema and conjunctival hyperemia. There were no systemic signs or symptoms. The diagnosis of endophthalmitis was assumed and the patient was hospitalized. Empirical oral antibiotic therapy was initiated (linezolid 600 mg bid, and moxifloxacin 400 mg id), with fortified eye drops (one daily application of ceftazidime 50 mg/mL, vancomycin 50 mg/mL and fluconazole 2 mg/mL). Unfortunately, the clinical condition aggravated. After five-days, the left eye was perforated. Total melting of the cornea and almost total herniation of the iris was observable. An abscess in the superior temporal quadrant of the ocular globe was registered, but computed tomography confirmed that the infection was still limited to the ocular globe. Feasibility of recovery was unlikely, therefore ocular evisceration was decided. Previous oral therapy was replaced by intravenous antibiotic therapy with vancomycin (1000 mg bid) and meropenem (2000 mg bid). The patient was surgically intervened and had no more complications. Upon admission, swab samples from the base of the corneal ulcer and from the ocular fundus were collected. Samples were seeded on blood agar, chocolate agar and Sabouraud agar. There was no growth in Sabouraud agar. As for the other culture medium, an indolent growth of orange/brown colonies was observed. *Capnocytophaga sputigena* was identify using the matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF). It was not possible to determine the antibiotic susceptibility profile. After ocular evisceration, surgical flaps were sent for microbiological evaluation, but no growth was registered in these second samples.

Discussion

Given the sole isolation of *Capnocytophaga sputigena* in the two initial samples, and considering previous records of similar cases, we believe this was not a mere contamination. Therefore, we believe this case portrays a rare complication of an endophthalmitis caused by *Capnocytophaga sputigena*. Regarding the characteristics of this microorganism, both the left corneal ulcer and the patient's immunosuppressed state were probable contributing factors for the left eye infection. Due to the clinical presentation's seriousness, we cannot guarantee whether there was antibiotic therapeutic failure due to resistance mechanisms or not. One can speculate that the delay to seek medical help might have been determinant to the outcome. Nonetheless, an antibiotic susceptibility profile could have helped answering this question.

Conflict of interest

The authors have no conflict of interest to declare.

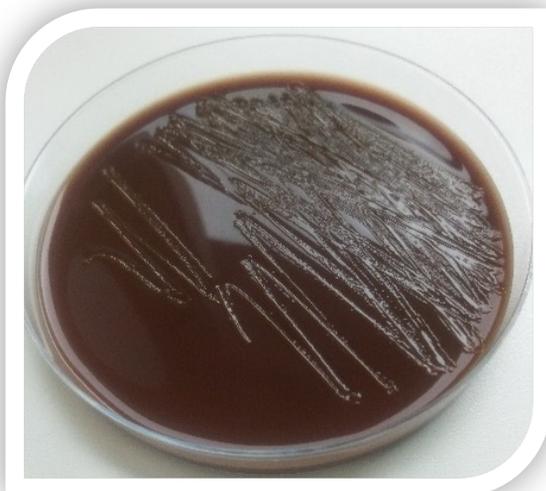


Fig. 1 *Capnocytophaga sputigena* isolated on chocolate agar.



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