INCIDENCE AND SENSITIVITY OF PROTEUS MIRABILIS IN OSIJEK CLINICAL HOSPITAL CENTRE DURING THE PERIOD 2009–2011

S Stiblik-Stipesic, D Vukovic. Clinical Hospital Osijek, Pharmacy, Osijek, Croatia

Background Proteus mirabilis is an opportunistic microorganism, which is an indicator of dirtiness on clinics and wards of the hospital.

Purpose To determine the number of isolates and sensitivity of P. mirabilis to antibiotics.


Sensitivity to carbapenems was 100%, to cephalosporins 86% in 2009, 93.7% in 2010, 96.4% in 2011; to penicillins 55% in 2009, 92% in 2010 and 70% in 2011; to fluoroquinolones 80.5% in 2009, 79.3% in 2010 and 89.6% in 2011; to aminoglycosides 81.4% in 2009, 87.68% in 2010, 95% in 2011; to sulfamethoxazole-trimethoprim: 60.7% in 2009, 66.3% in 2010, 65.4% in 2011: to nitrofurantoin: 5.3% in 2009, 5.4% in 2010, 3.6% in 2011.

Conclusions The number of isolates of Proteus mirabilis decreased in the period considered, due to new algorithms and protocols. If not in combination with other microorganisms, Proteus mirabilis is the only indicator of insufficient cleaning.

Sensitivity to penicillins, nitrofurantoin and cotrimoxazole decreased, but increased to fluoroquinolones, aminoglycoside and cephalosporins.

No conflict of interest.

INTRANASAL APPLICATIONS OF CAPSAICIN TO TREAT CLUSTER HEADACHE, A CASE REPORT


Background Cluster headaches are one of the most severe types of head pain. Intranasal medicines for the treatment of headache have recently received increased attention. In this sense, capsaicin has been proven to be a useful agent for the treatment of several painful diseases, but no conclusive information is available about the effects of intranasal capsaicin in people with chronic cluster headaches.

Purpose To describe the development of a formulation for a case of Horton’s headache refractory to other treatments, which was treated with intranasal capsaicin.

Materials and Methods A 59-year-old woman presenting cluster headache refractory to conventional therapy (anticonvulsants, antidepressants and deep brain stimulation) for four years. The treatment was authorised as compassionate use by the national regulatory agency for drugs. The preparation used contained capsaicin solution 0.075%, administered in a 1 ml insulin syringe. The patient received 0.1 ml of an emulsion containing capsaicin 0.3 mg dissolved in 80% saline solution, 10% paraffin oil, and 10% polyethylene glycol sorbitan monooleate (Tween 80), applied in both nostrils once a day for 7 days. The quality of the organoleptic properties was checked according to Good Manufacturing Practice. In the first week of treatment we administered half doses to reduce potential adverse effects as reported in the bibliography.

Results Intranasal capsaicin produces an intense burning sensation, lacrimation, and rhinorrhea that lasts for about 20 minutes, although these symptoms progressively decrease and disappear after 5–8 applications. In this case, the burning sensation in the nose was not tolerated by the patient and the treatment was discontinued.

Conclusions We could not extract relevant data relating to efficacy of the treatment because side effects developed. There are no formal studies of optimal formulations or treatment regimens and further studies are needed to elucidate the role of capsaicin in the treatment of cluster headache.

No conflict of interest.