

Myroides and Neurology: An Overview

Sir,

We read the article, “*Myroides odoratus* central nervous infection in a postneurosurgery patient” on the esteemed “Indian Journal of Medical and Paediatric Oncology” with great interest. Bhat *et al.* reported a case of meningitis secondary to *M. odoratus* followed by supratentorial craniotomy due to a recurrent right frontal malignant brain tumor that arises from astrocytes.^[1]

M. odoratus and *Myroides odoratimimus* are two important species of the *Flavobacteriales* order that cause infections in humans.^[2] In this context, pericardial effusion, pericarditis, pneumonia, soft tissue infection, septic shock, and urinary tract infection were already associated with these microorganisms. However, neurological infections were rarely reported in literature.^[3]

Here, we would like to provide a comparison between the two causes already published in the literature [Table 1].^[1,4] An interesting fact to be highlighted is that even though *Myroides* species infections are one of more resistant organisms in literature, in majority of the reports the individuals had full recovery.^[3]

A recent article by Hu *et al.* revealed that the comparative analysis of some *Myroides* strains is phylogenetically related with similar genomes.

Furthermore, their study showed that clustered regularly interspaced short palindromic repeats were found in two of the organisms. Thus, these results substantially contribute to a better understanding of the bacterial pathogenicity and antibiotic resistance mechanisms of this genus.^[5]

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Conflicts of interest

There are no conflicts of interest.

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Table 1: Case reports of patients with neurological infections by *Myroides* species

| References | Macfarlane <i>et al.</i> | Bhat <i>et al.</i> |
|--|---|--|
| Year, country | 1985, Jamaica | 2019, India |
| Age/sex | 6 weeks/male | 37 years/female |
| Comorbidities | Prematurity | Anaplastic astrocytoma in the right frontal lobe |
| Central nervous system infection | Meningitis (hydrocephalus and ventriculitis) | Meningitis following supratentorial craniotomy |
| Microorganism identified | Not clearly specified. It is described as <i>Flavobacterium odoratum</i> | <i>Myroides odoratus</i> |
| Performing tests for organism identification | Standard biochemical tests and API 2oE | VITEK2 (BioMérieux, Marcy l'Etoile, France) automated identification system and desferrioxamine (250 µg/disc) susceptibility testing |
| Management | First intravenous with penicillin and gentamicin. After no improvement, intraventricular cefotaxime was started | Vancomycin and cefoperazone-sulbactam. After susceptibility results, vancomycin was withdrawn |
| Follow-up | Full recovery | Full recovery of the infection |

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