

POSTER PRESENTATION

Open Access

# Management of brain abscesses in children

Gheorghiu Jugulete<sup>1,2\*</sup>, Monica Luminos<sup>1,2</sup>, Anca Drăgănescu<sup>1</sup>, Magdalena Vasile<sup>1</sup>, Angelica Vișan<sup>1,2</sup>, Mădălina Maria Merișescu<sup>1,2</sup>, Anuța Bilașco<sup>1</sup>, Camelia Kouris<sup>1</sup>, Endis Osman<sup>1</sup>, Sabina Șchiopu<sup>1</sup>, Adrian Iliescu<sup>3</sup>, Virgil Ionescu<sup>4</sup>

From The 9th Edition of the Scientific Days of the National Institute for Infectious Diseases Prof Dr Matei Bals

Bucharest, Romania. 23-25 October 2013

## Background

Bacterial brain abscess is an important cause of morbidity and mortality both in adults and in children. Usually, abscesses are secondary to congenital malformations or are complications of improperly treated infections. Rarely, abscesses appear without an apparent predisposing cause in a good state of health.

## Methods

We performed a retrospective study on cases of bacterial brain abscesses admitted in the Pediatric Intensive Care Unit of the National Institute for Infectious Diseases "Prof. Dr. Matei Bals" between 01 January 2008 and 01 January 2013. We monitored age, gender, predisposing factors, comorbidities, onset, treatment, evolution and complications.

## Results

In the aforementioned period we registered 12 cases of bacterial brain abscesses in children.

The female gender and the 8 to 14 age group have prevailed. 50% of cases presented a congenital heart defect, 25% untreated bacterial infections, 12.5% a history of craniocerebral injury and 12.5% presented no evident predisposing cause.

The onset consisted of: fever, vomiting, nausea, seizures, neurological problems. All of the cases required emergency neurosurgical treatment and specific antibiotherapy. Before the etiology of the infection was established, patients received empiric broad spectrum antibiotherapy (meropenem and linezolid), with subsequent antibiotic de-escalation over the next 6 weeks.

The treatment was monitored clinically, biologically and with imaging studies. The evolution was favorable in all cases. No deaths were registered. Neurological sequelae were present in 41.7% of the cases: hemiparesis, sight and speech problems, psycho-motor impairment, seizures.

## Conclusion

Careful monitoring of predisposing factors of brain abscesses is important for this severe condition which can result in permanent sequelae or death.

## Authors' details

<sup>1</sup>National Institute for Infectious Diseases "Prof. Dr. Matei Bals", Bucharest, Romania. <sup>2</sup>Carol Davila University of Medicine and Pharmacy, Bucharest, Romania. <sup>3</sup>Clinical and Emergency Hospital "Prof. Dr. Bagdasar Arseni", Bucharest, Romania. <sup>4</sup>Provita – Center of Diagnosis and Treatment Bucharest, Romania.

Published: 16 December 2013

doi:10.1186/1471-2334-13-S1-P98

**Cite this article as:** Jugulete et al.: Management of brain abscesses in children. *BMC Infectious Diseases* 2013 **13**(Suppl 1):P98.

\* Correspondence: georgejugulete@yahoo.com

<sup>1</sup>National Institute for Infectious Diseases "Prof. Dr. Matei Bals", Bucharest, Romania

Full list of author information is available at the end of the article