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V. Pérez Cateriano*, A.M. Lubombo Kinsay, A.C. Caballero Zirena, A. Álvarez Terrero

Servicio de Medicina Intensiva, Hospital Virgen de la Concha, Zamora, Spain

* Corresponding author.

E-mail address: vpc_51@hotmail.com (V. Pérez Cateriano)

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Meningitis associated with spinal anaesthesia: not always bacterial[☆]

Meningitis asociada a anestesia espinal: no siempre bacteriana

Sir,

Laguna del Estal et al.¹ have recently reported a series of patients with bacterial meningitis associated with epidural analgesia and anaesthesia, and in their discussion they quite rightly pointed out that the differential diagnosis must include chemical meningitis.¹ It is important to stress that meningitis induced by the local administration of anaesthetics must also be suspected whenever the cultures are negative. The clinical picture produced is indistinguishable from that of bacterial meningitis, but what many clinicians are unaware of is that the cerebrospinal fluid (CSF) may also be negative, revealing intense pleocytosis and polymorphonuclear predominance. These situations are well documented with, for example, bupivacaine, which may trigger pleocytosis of several thousand leucocytes with a percentage of polymorphonuclear cells close to 100%.^{2–4} Some important facts may help distinguish between bacterial and aseptic meningitis. First of all, the latency between epidural anaesthesia and the onset of symptoms as a time of less than 6 h suggests that it is chemical meningitis. Second, the presence of eosinophilia in CSF, which is “never” seen in bacterial meningitis but is in drug-induced meningitis, or else that the patient presents atopy. Third, the presence of

hypoglycorrachia less than 30 mg/dL, typically occurring in bacterial forms (albeit also described in aseptic cases). And finally, a frank elevation of acute phase reactants, common only in bacterial meningitides.

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S. Reus Bañuls^{a,*}, S. Bustos Terol^b, S. Olmos Soto^a, D. Piñar Cabezas^a

^a *Unidad de Enfermedades Infecciosas, Hospital General Universitario de Alicante, Alicante, Spain*

^b *Sección de Neurología, Hospital Clínico de San Juan, Alicante, Spain*

* Corresponding author.

E-mail address: reus_ser@gva.es (S. Reus Bañuls)

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