



EPIDURAL ABSCESS

The exact mechanism by which an epidural abscess causes spinal cord damage is unclear. Cord compression can be demonstrated radiologically, but the damage is often out of proportion to the degree of compression (1).

Most epidural abscesses are located posteriorly in the thoracic or lumbar spine and they most often originate from a distant focus such as a skin infection, pharyngitis, or dental abscess. Anterior epidural abscesses are commonly associated with discitis or vertebral osteomyelitis. These abscesses can also be caused by direct extension from retropharyngeal or retroperitoneal abscess through communication with intervertebral foramina. Blunt trauma is reported to precede the symptoms of spinal epidural abscess in 15 to 35 percent of cases and it is postulated that trauma may result in the formation of a vertebral hematoma, which serves as a rich nutrient source for infection (2).

1. S. GREWALI, G. HOCKING AND J. A. W. WILDSMITH. EPIDURAL ABSCESS BR J ANAESTH 2006; 96: 292-302

2. CHAO D., AND NANDA A., SPINAL EPIDURAL ABSCESS: A DIAGNOSTIC CHALLENGE AM FAM PHYSICIAN 2002;65:1341-6.

Call me naive, but I have always believed that the practice of science should be evidenced base. Recently, I read a review (1) of a survey on preventing epidural abscess whereby the reviewer enjoins us to wear face masks during the placing an epidural believing that this activity (i.e. the wearing of a face mask) will greatly contribute to a reduction in the incidence of of this oft devastating problem. In the article, the author makes what I consider a presumptive leap by extrapolating the findings of studies which have shown that infection rates from the insertion of central venous catheters are reduced when a face mask is worn in conjunction with a cap, gown and sterile gloves (2,3). Why the wearing of a face mask is deemed intrinsic to the insertion of an epidural eludes me especially since there is sufficient evidence that masks do not decrease the rate of surgical wound infection.(4)

Moreover, there are more case reports in the literature describing the occurrence of these complications despite the anesthesia practitioner wearing a face mask than there are implicating the practitioner when no mask was worn. In fact, in a recent case report of Streptococcus Mitis meningitis following spinal anesthesia by Villeveille et al. (5), not only was a mask worn, but also a sterile gown. The block was placed in the operating room with all personnel dressed sterilely!

Observational and case control studies have *only implicated* health care providers, as the source of infections. There is no definitive proof!

The use of face masks was originally debated by Wildsmith (6) and Yentis (7) in the British literature. After the de-

bate, Wildsmith engaged in a laboratory study designed to investigate if the use of a face mask reduced contamination of agar plates placed 30 cm directly in front of anesthesiologists who spoke at them for several minutes. Face masks did decrease agar plate growth, but there was increased growth on the agar plates once the face mask was worn for 15 min (8). This occurred despite the study being performed in a completely draft-free room—hardly representative of a usual holding room. I submit for your consideration that not too many anesthesia practitioners change their masks for each new procedure; some probably wear the same mask all day long, and some take longer than 15 min to place a neuraxial block. And the face mask itself may even contribute to the risk of infection by increasing skin scale shedding (9).

Because of the elusive nature of this problem, the ASA has difficulty promulgating guidelines mandating the wearing a mask during the performance of an epidural. In the February 2007, ASA Newsletter, Dr. Hughes writes. “Unlike the guidelines for central venous catheter placement, it is unlikely that we will ever show conclusively that more rigid, uniform infection control procedures will be effective in reducing neuraxial infection ...because the incidence of infection is just too low” (10).

It is time to remove this bit of sophistry from our practice. I think there is a compelling argument that although thorough hand washing and use of sterile gloves is intrinsic to controlling the risk of epidural infection, mandating that a face mask be worn outside the surgical theatre for the the sole purpose of reducing the incidence of epidural abscess while placing an

epidural borders on the realm of magical thinking.

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