Correspondence

Hematoma Following Epidural Block

To the Editor—The interesting case report by Helperin and Cohen, "Hematoma Following Epidural Anesthesia" (Anesthesiology 35:641–644, 1971), once more draws attention to the possible risk of anticoagulation following epidural block. The authors, however, do not refer to spontaneous spinal epidural hematoma. More than 100 cases of epidural hematoma unassociated with epidural block in patients on anticoagulants have been reported. Is spontaneous epidural hematoma sometimes incorrectly attributed to epidural block? On the other hand, is this tendency to hematoma in patients on anticoagulants accentuated by the use of epidural block? More important is an awareness that epidural hematoma may follow anticoagulation and/or epidural block. It is therefore important to allow a continuous epidural block to wear off for long enough to assess motor and sensory function at some time during the first 24 postoperative hours. Failure to recover function fully and, in some cases, severe lumbar pain, indicate the possibility of epidural hematoma. Anticoagulants should then be stopped and myelography carried out immediately, because most patients who have recovered from epidural hematoma have been decompressed within 72 hours of the onset of symptoms.

With this potential risk, do the benefits justify epidural block? In theory, the avoidance of general anesthesia and a favorable influence on graft blood flow recommend epidural block in patients with ischemic heart disease and marginal lower-limb blood flow. The only information available does show an increased vascular graft blood flow following epidural block in arteriosclerotic patients undergoing lower-limb vascular operations. There remains a need for randomized prospective studies of this technique versus general anesthesia with respect to immediate and long-term graft survival and patient mortality.

It is also worth noting that surgical procedures involving the abdominal aorta may cause paraplegia. This may be the result of prolonged clamping of the aorta or sectioning of nutrient arteries to nerve plexuses and the spinal cord. Thus, while in lower-limb vascular surgery anticoagulation or epidural block, or both, may lead to epidural hematoma and paraplegia, in aortic surgery direct cord ischemia must be added to the differential diagnosis of postoperative paraplegia.

The risk–benefit ratios of epidural block in both these categories of patients need to be better defined. In the meantime, the indications for epidural block in each patient should be carefully assessed. If epidural block is used, postoperative neurologic deficits should be viewed in the light of the differential diagnosis discussed above and, when necessary, surgical intervention should be early.

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References