2. Croce E, Azzola M, Russo R, Golia M, Angelini S, Olmi S: Laparoscopic liver tumour resection with the argon beam. Endosc Surg Allied Technol 1994; 2:186–8

3. Mastragelopulos N, Sarkar MR, Kaissling G, Bahr R, Daub D: Argon gas embolism in laparoscopic cholecystectomy with the Argon Beam One coagulator. Chirurg 1992; 63:1053–4

4. Palmer M, Miller CW, Van Way CW, Orton EC: Venous gas embolism associated with argon-enhanced coagulation of the liver. J Invest Surg 1993; 6:391–9

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A Useful Maneuver when Intravenous Access is Difficult

To the Editor:—It is not uncommon for intravenous access to be difficult because a patient has severe vasoconstriction or a poor superficial venous system. Sometimes, application of a warm compress over the patient's hand will dilate the veins sufficiently. The following is another technique that may assist in cannulating peripheral veins, without resorting to a central venous route. If a patient arrives in the operating room with a 25G needle in place, use it. If not, try inserting a 22G or a 25G needle anywhere you can find a vein. After ensuring the intravenous line is functioning, apply a venous tourniquet to the upper arm and infuse 50–100 ml of intravenous solution with a 10 ml syringe. One will be pleasantly surprised to find the patient's veins unexpectedly accessible.

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Infectious Complications after Epidural Anesthesia

To the Editor:—A recent case report by Pinczower and Gyorke[1] addressed a clinically important but rarely reported subject—an infectious complication of epidural anesthesia and analgesia. Because of clustering and pure chance, prospective studies on epidural anesthesia were not large enough to detect rare events such as epidural abscess or vertebral osteomyelitis.[2] A recent, large, retrospective study that analyzed 288,000 epidural catheterizations suffers from potential misclassification bias and other restrictions linked to retrospective analysis by a questionnaire.[3] In addition, symptoms of infectious complications related to an epidural catheter may present so late that they are not traced back to the previous epidural catheter. Recognizing catheter-related infections such as epidural abscess[4] or vertebral osteomyelitis[1] is important, because they can result in permanent neurologic damage. The need for an increased level of awareness of catheter-related osteomyelitis is stressed by two previous case reports of this complication and by a time delay of 8 and 15 weeks between onset of symptoms and definite diagnosis in these patients.[5,6] The question of whether the epidural catheter only serves as a nidus for hematogenous spread or as a primary entrance port of infection can rarely be answered in the individual case and has no influence on course and treatment of this complication. However, it is interesting that the patient reported by Pinczower and Gyorke and one of the previously reported patients[6] were both diagnosed with vertebral osteomyelitis secondary to Pseudomonas aeruginosa, whereas the most common organism in epidural catheter-related infections is Staphylococcus aureus.[7] An important aspect is that all three patients with catheter-related osteomyelitis were immunocompromised. Pinczower and Gyorke's patient received systemic methylprednisolone therapy and, of the previously reported patients, one received triamcinolone and betamethasone epidurally, in addition to suffering from diabetes mellitus,[5] and the other patient was immunocompromised by a history of pancreatitis and high alcohol intake.[6]

It is necessary to increase the index of awareness among physicians for infectious complications of epidural anesthesia and analgesia, and special care should be exercised with epidural catheters in immunocompromised patients.