

pachymeningitis, from a circumscribed serous meningitis. Persistent and intractable pain is also a frequent indication.

Local anesthesia should be used whenever possible and the incision should be planned to include at least three vertebræ. The dura should never be opened unless there is clear indication that the bullet is within the dural sac. As a rule the dural incision should be closed to prevent infection; only in the rare instances when undue pressure would result from the swollen and edematous condition of the cord and in the absence of an infection from the wound should it be left unsutured. Catheterization is condemned because of the inevitable ascending infection. It has become customary in many war hospitals to allow the bladder to empty itself by overflow.

**Blanc y Fortacin, J.** SPINAL ANESTHESIA. [Rev. d. Med. y Cir. Prac., Mar. 7, 1918.]

Blanc reports his success with spinal anesthesia especially in leg operations. With some herniotomies he found a few whiffs of chloroform necessary. The injection takes effect in from three to ten minutes and lasts for about two hours. Contact sensation is not lost however. Sometimes there is slight headache which soon disappears, and often a febrile reaction with a turbidity apparent the next day in the spinal fluid with polynucleosis, showing aseptic irritation of the meninges, but normal conditions soon return. Vomiting and paresis were never present.

Only two of 200 cases resulted seriously. In one of these the assistant had used by mistake 0.12 gm. of novocain and syncope resulted, which was soon counteracted by artificial respirations. Conditions were most unfavorable in the other case, one for retrograde catheterization in an elderly man with impassable stenosis of the urethra. Cyanosis, coma and death followed the operation. There was one operation above the umbilicus upon an echinococcus cyst in the liver. This was successful. The anesthetic used as a rule consisted of 6 cg. each of stovain and glucoses and 1:1000 epinephrin in 1 c.c. of physiologic serum. Later it has consisted of cocain and epinephrin.

**Brickner, W.** SPINA BIFIDA OCCULTA. [Am. J. M. Sc., April, 1918, J. A. M. A.]

He believes that the following are legitimate indications for operation in cases of spina bifida occulta: 1. In infants and children, spina bifida occulta with congenital lipoma or hypertrichosis, even though without any symptoms—to reduce the spinal hernia into the canal or to meet any other indication that is found, in the hope of obviating the development of symptoms during adolescence. 2. In adults, spina bifida occulta with sufficiently serious and especially with progressive symptoms, whether or not the spina bifida occulta is marked by external