From the existing information in the literature on autopsy material, it was inevitable that eventually diastematomyelia (cleft or division of the spinal cord) would be diagnosed and operated upon during adult life.

CASE REPORT

E.F. (L#269479) was admitted to the Robert Long Hospital of the Indiana University Medical Center on June 19, 1959, with the chief complaint of pain of increasing severity in her left leg. She was a 43-year-old white housewife with a severe limping gait with the indication that her left leg was short. She had been well until 3½ years before when she noted the onset of pain in the left hip and leg with the result that she began to limp. This gradually progressed in severity, and she consulted physicians who took roentgenograms of her spine.

FIG. 1. Views of lower back. Note that the majority of the hair arises from the right. Marked lordosis is evident.

FIG. 2. (A) There is nonfusion of the neural arches of the 2nd, 3rd, 4th, and 5th lumbar vertebrae. There is fusiform widening of the interpedicular space without evidence of erosion of the pedicles. A midline bony spicule arises from the body of the 3rd lumbar vertebra and is projected over the 2nd intervertebral space. (B) There is narrowing of the anterior posterior diameter of the bodies of the 3rd and 4th lumbar vertebrae. "The bony spicule arising from the posterior surface of the body of the 3rd lumbar vertebra can be well seen" (preoperative note by Dr. Eugene C. Klatte, Radiology Department).
She was told that nothing could be done for she had a deformity with which she had been born. She was provided with a lift for her left shoe. As the pain increased and the gait became worse, she asked for consultation at the Medical Center. She had apparently lived a normal life until the age of 38, having had four pregnancies and four fully grown normal children.

Examination. There was marked lordosis with a severe pelvic tilt to the right, tending to pull the left leg up. On measurement, the legs were of equal length and all measurements of girth of the limbs were equal. The feet had normal arches. In the lumbar area there was much pain on pressure surrounding an area of reddish skin, almost entirely to the right of the midline. This area was covered by a heavy growth of long black hair (Fig. 1). There was a deep midline dimple over the sacrum. There was mild compensatory scoliosis with the apex to the right in the lower dorsal region. Upon palpation, there appeared to be bifidity of the last four lumbar and sacral posterior spines, with an unusual bony element in the midline at the level of the 2nd and 3rd lumbar vertebrae. The left leg seemed to be fixed at the hip and the knee showed evidence of contracture. There was pain with straight leg raising on the left and tenderness over the course of the left sciatic nerve on pressure. The remainder of the findings were singularly without major abnormalities. Sensation was intact in all modalities and motion was present in all areas, although weaker on the left. The left ankle jerk was present but not as brisk as on the right.

Roentgenograms taken shortly after disability began revealed the presence of multiple spinal congenital anomalies (Fig. 2) with the suggestion of a midline bony spicule. Films taken at the time of admission showed the same anomalies with evidences of changes in the left hip joint (Fig. 3). There was fusiform widening of the interpedicular space without evidence of erosion of the pedicles.

Clinical Diagnosis. Upon review of the information at hand, major consideration was given to intraspinal lipoma, intraspinal meningocele, epidural granuloma, and diastematomyelia. The arguments weighed so heavily toward diastematomyelia that this was indicated as the primary diagnosis when surgical exploration was suggested.

Operation. On June 22, 1959, under general endo-