CASE REPORTS

Cervical Intervertebral Disc Space Infection Following Cerebral Angiography

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Summary. A probable cervical disc space infection developing after percutaneous carotid angiography is reported.

Infection d'un espace intervertébral cervical après angiographie cérébrale
Résumé. Description d'un cas d'infection discale développée après artériographie carotidienne percutanée.

On April 11, 1968 this 64-year-old Caucasian male had sudden onset of numbness, weakness, and incoordination of the right arm and leg. Examination disclosed no bruit over the carotid arteries in the neck. There was slight weakness of the right soft palate and the tongue deviated to the right side on protrusion. It was postulated the patient had experienced a transient ischemic attack of the left cerebral hemisphere. To evaluate these complaints bilateral percutaneous carotid angiography was done on April 15, 1968. The patient stated that the artery in his

Fig. 1. Lateral radiograph of cervical spine showing destruction of C5—6 interspace and widening of the retropharyngeal air space anterior to C5—6 on May 14, 1968

Fig. 2. Lateral radiograph of cervical spine showing destruction of C5—6 interspace on May 23, 1968

neck was cannulated with difficulty. Numerous percutaneous punctures were made into the neck associated with marked discomfort. There was an extraluminal injection of the contrast media on the right side. These
numbness, weakness, and incoordination of the right side cleared in two weeks.

On April 19, 1968, or four days after the carotid angiogram and two days after the right retrograde arteriogram, the patient developed severe pain in his neck and in both shoulders. He was told that he had a herniated intervertebral disc in the cervical region. Radiographs of the cervical spine showed no change compared with films made in 1965 and 1967 of the same area. These films had been made to visualize the area of the right parotid in a search for calculus.

By May 1, 1968, the patient was having severe pain in his neck and was unable to work. On May 14, 1968, or three and one-half weeks after normal radiographs of the cervical spine, repeat radiographs showed destruction of the C5–6 interspace and destruction of the contiguous vertebral bodies. There was widening of the retropharyngeal air space anterior to C5–6 (Figs. 1, 2, 3).

The patient was extensively evaluated over several months for possible causes of the destruction between C5–6. With bracing of the neck, antibiotic therapy, and time, the patient's pain gradually subsided. Two years after onset, April 1, 1970, radiographs (Figs. 4, 5) of the cervical spine showed obliteration of the interspace between C5–6. The retropharyngeal air space was no longer widened. The patient was symptomatically much improved and had returned to work.

It was concluded that the patient probably had an intervertebral disc space infection between C5–6 which was produced by the percutaneous carotid angiography. It is postulated that this complication developed because of the vulnerability of the intervertebral disc space to infection [1]. The numerous punctures in the neck could have injured the intervertebral disc.