

Twenty patients with invasive carcinoma of the cervix (FIGO stages 1B or higher) underwent abdominal and pelvic CT examination as part of their presurgical staging evaluation. One patient had only microscopic tumor invasion, but the other 19 patients had a pelvic mass seen on CT examination as either diffuse enlargement (10 patients) or replacement of the normal cervix, uterus, or adenexae by a lobulated mass (nine patients). The accuracy of CT as compared with surgical findings was 85% for each of three parameters: parametrial involvement, para-aortic lymph node metastases, and extension to the pelvic side wall. CT is superior to other clinical staging procedures for carcinoma of the cervix and has the additional advantages of being noninvasive and providing precise tumor delineation for radiation therapy planning.

N. Reed Dunnick

**EMERGENCY PRESENTATION OF SUBDURAL HEMATOMA: A REVIEW OF 85 CASES DIAGNOSED BY COMPUTERIZED TOMOGRAPHY.** S. Vicario, D. Danzi, and D. Thomas. *Ann Emer Med* 1982;11:475-9 (Department of Emergency Medicine, University of Louisville, 323 East Chestnut Street, Louisville, KY 40202).

The emergency presentations of 85 patients diagnosed by computed tomography (CT) as having subdural hematomas (SDH) were retrospectively reviewed to identify factors contributing to an early or delayed presentation. Sixty-one of 85 patients (72%) were diagnosed within 24 h of presentation. Forty-five of 57 (79%) with definite history or signs of cranial trauma were diagnosed within 24 h, whereas only 16 of 28 (57%) without historical or physical evidence of trauma were diagnosed promptly. Focal neurologic signs were present in 32 of 57 patients (56%) with head trauma and 24 of these patients (75%) had early CT. Twenty-two of 50 patients (44%) with head trauma had skull fractures, but the presence or absence of skull fracture alone did not serve to hasten the diagnosis in this group. In patients without head trauma, 14 of 28 (50%) had focal neurologic signs, with 8 of 14 (57%) undergoing CT within 24 hr. No patient in this group had an abnormal skull series. Thus, despite the immediate availability of CT, a significant number of patients, especially those without history or evidence of head trauma, had a delay in diagnosis exceeding 24 h. The presence of a focal neurologic sign is a more sensitive indicator of the presence of SDH than is a positive skull series.

Authors' Summary

**DELINEATION OF UNRUPTURED CEREBRAL ANEURYSMS BY COMPUTERIZED ANGIOTOMOGRAPHY.** S. Asari, T. Satoh, M. Sakurai, Y. Yamamoto, and K. Sadamoto. *J Neurosurg* 1982;57:527-34 (Department of Neurological Surgery, Matsuyama Shimin Hospital and Sadamoto Hospital, Matsuyama, Ehime, Japan).

Unruptured aneurysms were diagnosed in 15 of 86 patients with cerebral aneurysms during 2 years, beginning in April 1979. One patient with severe head injury was excluded from the series. Fifteen aneurysms in the other 14 patients were first detected by computed angiotomography. Six aneurysms were located in the middle cerebral artery, three in the upper one-half of the basilar artery, two in the anterior communicating artery, two in the posterior cerebral artery, and two at the internal carotid-posterior communicating artery junction (both in the same patient). Three were smaller than 5 mm, eight were between 6 and 10 mm, and four were larger than 10 mm. The noncontrast-enhanced computed tomography (CT) findings associated with 15 aneurysms were as follows: five showed defects in the basal cistern or sylvian fissure, four were calcified or high-density masses, and in six instances there was no evidence of an aneurysm. An unruptured aneurysm may be suggested by a well demarcated, round, isodense mass which forms a defect in the basal cistern or sylvian fissure on a plain CT image, and is highly

and homogeneously enhanced by computed angiotomography. A carotid artery blood iodine level of 15 mg/ml is required to obtain clear images. The authors conclude that computed angiotomography is useful in the delineation of unruptured aneurysms.

Authors' Summary

**ISCHEMIC CEREBROVASCULAR COMPLICATIONS OF HAEMOPHILUS INFLUENZAE MENINGITIS: THE VALUE OF COMPUTED TOMOGRAPHY.** D. Dunn, R. Daum, L. Weisberg, and R. Vargas. *Arch Neurol* 1982;39:650-2 (Department of Neurology, Tulane University School of Medicine, 1415 Tulane Avenue, New Orleans, LA 70112).

In an effort to define the value of computed tomography (CT) in assessing cerebral involvement in children with severe *Haemophilus influenzae* meningitis, we studied 12 children who had focal neurologic deficits on admission or within the early days of illness. CT reliably excluded abscess and cerebritis and suggested ischemic cerebrovascular lesions in 11 of 12 children. Scans performed early in the hospital course generally showed low-density lesions occurring in a vascular distribution without detectable mass effect or enhancement. Later in the clinical course, there was consistent enhancement of gray matter or diffuse enhancement in the area of the vascular lesion. The duration of symptoms of meningitis ranged from 5 to 21 days (mean 13 days) and appeared to predispose to these vascular lesions. CT consistent with infarction of brain parenchyma occurred predictably in patients with persistent focal neurologic deficits and was correlated with poor outcome.

Authors' Summary

**INTRACRANIAL TUBERCULOMAS: CORRELATION OF COMPUTERIZED TOMOGRAPHY WITH CLINICOPATHOLOGICAL FINDINGS.** L. Loizou and M. Anderson. *Q J Med [New Series]* 1982;L1(201):104-14 (Midland Center for Neurosurgery and Neurology, Holly Lane, Smethwick, Warley, West Midlands B67 7JX, U.K.).

Ten patients with intracranial tuberculomas were examined with computed tomography (CT). Four patients presented with symptoms of intracranial mass lesions and six developed tuberculomas as a complication of tuberculous meningitis. The CT appearance of the lesions varied with the stage of evolution. Early lesions were isodense or slightly hypodense compared to the surrounding brain with homogeneous enhancement. Later, after capsule formation, the lesions were isodense or slightly hyperdense with ring-shaped enhancement; and, finally, with the development of microcalcifications the lesions became hyperdense with no contrast enhancement. The CT appearance is not specific for tuberculoma, and the clinical picture is very important in establishing the correct diagnosis.

Kerry K. Ford

**CLINICALLY-DIRECTED CT IN OCCULT DISEASE OF THE SKULL BASE INVOLVING FORAMEN OVALE.** A. Noyek, E. Kassel, G. Wortzmann, H. Jazrawy, and R. Holgate. *Laryngoscope* 1982;92:1021-7 (99 Avenue Road, Number 207, Toronto, Ontario, Canada M5R 2G5).

Occult disease of the skull base may present as an isolated neurogenic symptom in the absence of physical signs or radiologic findings. It, therefore, often remains undiagnosed until advanced. Computed tomography (CT) provides the potential for diagnostic imaging far beyond conventional radiology. Not only do current generation scanners provide exquisite bone detail, they also provide the capability of soft tissue imaging.

In the past year, we have matched the diagnostic problem of occult disease of the middle fossa skull base and its foramina with the potential diagnostic imaging solution of CT. Five pa-