Reports for Case N-10

CONTRAST-ENHANCED CT SCAN OF THE THORACIC AND LUMBAR SPINE

CLINICAL INDICATION: "Evaluate for abscess around osteomyelitis at T4 T5 and look for other phlegmon"

TECHNIQUE: Today's examination is performed following the intravenous administration of approximately 100 mL of Isovue-300 contrast material. The patient is scanned in axial projection. From the axial data set, coronal and sagittal reformatted views are obtained. DLP equals 3911.

FINDINGS: Examination of the thoracic spine demonstrates irregularity of the opposing endplates at the T4-T5 level consistent with osteomyelitis. Abnormal paraspinous soft tissue is present at this level with enhancing soft tissue seen anterior to the spine and posterior to the trachea and esophagus. The abnormal soft tissue extends from approximately the T3-T4 interspace to the T5-T6 interspace. The enhancement pattern is heterogeneous. There is a focal area of nonenhancement measuring approximately 8 mm in transverse dimension. This focus likely represents a paraspinous abscess. No definite epidural abscess is identified however a contrast enhanced MR would be a more sensitive examination.

The remainder of the thoracic spine shows scattered degenerative changes. Examination of the lumbar spine also shows scattered degenerative changes. No findings suggestive of spinal infection are present in the lower thoracic spine or lumbar spine.

IMPRESSION: Endplate irregularity and destruction at the T4-T5 level is consistent with spinal osteomyelitis and disc space infection. Heterogeneously enhancing paraspinous soft tissue mass is consistent with a paraspinous phlegmon with a small abscess cavity measuring approximately 8 mm in maximum transverse dimension. Although no definite epidural abscess is identified, a contrast enhanced MR is a more sensitive study

Study: PRE AND POST CONTRAST-ENHANCED MR OF THE ENTIRE SPINE

CLINICAL INDICATION: "Concern for spinal abscess"

TECHNIQUE: Today's examination is performed both before and after the intravenous administration of 15 mL of contrast material. Examination is compared to a CT from one day prior.

FINDINGS: Examination of the cervical spine demonstrates scattered degenerative changes the findings appear most severe at the C6-C7 level or disc osteophyte formation causes a moderate spinal canal stenosis and a severe right neural foraminal stenosis. Contrast enhanced examination of the cervical spine demonstrates no abnormal contrast enhancement to suggest spinal infection.

Examination of the thoracic spine again demonstrates findings consistent with infection at the T4-T5 level. The intravertebral disc space appears abnormal consistent with a disc space infection. The T3, T4 and T5 vertebral bodies appear abnormal consistent with spinal osteomyelitis. Anterior to the spine an abnormally, heterogeneously enhancing paraspinous soft tissue mass is consistent with paraspinous infection. There is a small focus of nonenhancement measuring less than 1 cm in transverse dimension which may represent a small abscess. This finding is unchanged from prior exam. The extent of abnormal enhancement is better appreciated on the CT as compared is better appreciated on the MR as compared to the CT. Abnormal enhancement anterior to the spine extends from approximately the mid body of T2 to the T7 and T8 interspace. There is also abnormal enhancement within the epidural space

consistent with an epidural phlegmon. This phlegmon is most prominent on the right at the T4 level and causes a moderate spinal canal stenosis. Phlegmon extends from the C3-C4 interspace to the T5-T6 interspace.

Evaluation of the lumbar spine demonstrates minimal degenerative changes but no findings suggestive for infection. Specifically no abnormal enhancement is present.

Impression: 1. Degenerative changes are described within the cervical spine.
2. Findings consistent with spinal infection are described in the thoracic spine. There is a disc space infection at the T4-T5 level. There is osteomyelitis involving the T3, T4 and T5 vertebral bodies. There is an epidural phlegmon most prominent on the right at the T4 level and causing a moderate spinal canal stenosis. There is an extensive, heterogeneously enhancing, paraspinous soft tissue mass consistent with paraspinous phlegmon. Within the phlegmon a subcentimeter region of nonenhancement that may represent a small abscess.
3. Lumbar spine demonstrates minimal degenerative