Teleradiology aids in assessment of thoracolumbar spine fractures

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(HealthDay)—Video clips of computed tomography (CT) scans can be

captured by smartphone and transmitted to surgeons' personal smartphones for reliable diagnosis, classification, and proposed treatment of thoracolumbar spine fractures, according to a study published in the February issue of *The Spine Journal*.

Ido Stahl, M.D., from Rambam Healthcare Campus in Haifa, Israel, and colleagues compared the reliability of interpreting CT scans viewed by orthopedic surgeons in two ways for diagnosing, classifying, and treatment planning in 30 adults with thoracolumbar spine fractures. CTs were captured as video clips from a standard workstation-based picture archiving and communication system (PACS) and sent via WhatsApp instant messaging for viewing on the personal smartphones of five spine surgeons or were viewed directly on a PACS.

The researchers found that for determining fracture level, intraobserver agreement was near perfect ($\kappa = 0.94$). There was substantial intraobserver agreement for AO classification, proposed treatment, neural canal penetration, and Denis classification (κ values, 0.75, 0.73, 0.71, and 0.69, respectively). For loss of vertebral height and kyphosis, intraobserver agreement was moderate (κ values, 0.55 and 0.45, respectively).

"Diagnosing, classifying, and proposing treatment of fractures of the thoracic and lumbar spine can be made with equal reliability by evaluating video clips of CT scans transmitted to a smartphone or by the standard method of viewing the CT scan on a workstation-based PACS," the authors write.

More information: Full Text (subscription or payment may be required)

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