CT effective in detection of significant cervical spine injury

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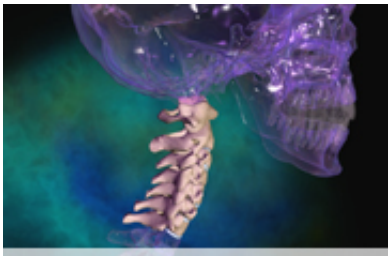

Image courtesy of Blausen Medical

(HealthDay)—Computed tomography (CT) is effective in detecting clinically significant cervical spine (CS) injuries in patients with neurologic deficit or CS pain, according to a study published online July 30 in *JAMA Surgery*.

Shelby Resnick, M.D., from the Los Angeles County + University of Southern California Medical Center, and colleagues assessed initial examinations, all CS imaging results, interventions, and final CS diagnoses among 830 adults. Patients were awake, alert, and able to be examined, and had experienced blunt trauma with resultant midline CS tenderness and/or neurologic deficits.

The researchers found that 164 CS injuries (19.8 percent) were diagnosed, with 23 of these (2.8 percent) being clinically significant. CT

detected all clinically significant injuries. Of 681 patients with a normal CT scan, 15 (2.2 percent) had a newly identified finding on magnetic resonance imaging, although none of the injuries required surgical intervention, halo placement, or change in management. For detecting CS injury, the sensitivity and specificity of CT were 90.9 and 100 percent, respectively. The sensitivity and specificity were both 100 percent for clinically significant CS injuries.

"Computed tomography is effective in the detection of clinically significant CS injuries in adults deemed eligible for evaluation who had a neurologic deficit or CS pain," the authors write. "Magnetic resonance imaging does not provide any additional clinically relevant information."

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