Needle type doesn't change epidural vascular uptake risk

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Catheter-extension needles demonstrated a reduced incidence of vascular uptake but also result in a significantly higher rate of functional pitfalls that limits their usefulness in routine practice," the authors write.

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

(HealthDay)—Blunt-tip and pencil-point needles have comparable risks of inadvertent vascular injection during lumbosacral transforaminal injections, according to a study published online Oct. 7 in *Pain Medicine*.

Matthew Smuck, M.D., from Stanford University in Redwood City, California, and colleagues determined the presence or absence of vascular uptake after fluoroscopically guided lumbosacral transforaminal epidural injections. Using three different needle types, the same interventional spine physician performed the procedures on 475 consecutive, consenting patients. Contrast injection under live fluoroscopy was used to determine vascular uptake.

The researchers found that 58 of the 475 injections had vascular uptake. The incidence of inadvertent vascular uptake was 16.6 percent in the pencil-point group and 15.6 percent in the blunt-tip group compared with 4.9 percent in the catheter-extension group. The incidence of functional pitfalls was significantly lower in the pencil-point group than in either the catheter-extension or blunt-tip needle group.

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