Pregnancy-adapted algorithm avoids diagnostic imaging for PE

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(HealthDay)—A pregnancy-adapted algorithm can safely avoid

diagnostic imaging in a proportion of pregnant women with suspected pulmonary embolism, according to a study published in the March 21 issue of the *New England Journal of Medicine*.

Liselotte M. van der Pol, M.D., from the Leiden University Medical Center in the Netherlands, and colleagues examined whether a pregnancy-adapted algorithm could be used to safely avoid diagnostic imaging in pregnant women with suspected pulmonary embolism. Three criteria from the YEARS algorithm (clinical signs of deep vein thrombosis, hemoptysis, and pulmonary embolism as the most likely diagnosis) were assessed, and D-dimer level was measured. All patients in whom pulmonary embolism had not been ruled out by the YEARS algorithm underwent computed tomography (CT) pulmonary angiography. Five hundred ten women were screened, and 2.4 percent were subsequently excluded.

The researchers found that pulmonary embolism was diagnosed in 4.0 percent of patients at baseline. In 39 percent of patients, CT pulmonary angiography was not indicated and thus avoided. The efficiency of the algorithm was highest and lowest during the first and third trimester, respectively; CT pulmonary angiography was avoided in 65 and 32 percent of patients who began the study in the first and third trimester, respectively.

"Our study showed that the pregnancy-adapted YEARS algorithm was able to safely rule out pulmonary embolism in pregnant women with suspected pulmonary embolism," the authors write. "CT pulmonary angiography was avoided in 39 percent of the patients, thus averting potential harm from radiation exposure."

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