Re-revision Total Knee Joint Arthroplasty

OP Kapoor

In India I find that young patients of around 50 years of age are undergoing knee arthroplasty. Usually after 10 to 15 years they may need Revision Arthroplasty which is a more difficult operation. But if these patients live long, they may need Re-revision arthroplasty which will be a very difficult operation. Some of them would need surgery with mega prosthesis with total resection of the knee joint - an operation which is being done for patients having sarcoma of the thigh wherein the past amputation was being done routinely in those young patients.

Ex. Hon. Physician, Jaslok Hospital and Bombay Hospital, Mumbai, Ex. Hon. Prof. of Medicine, Grant Medical College and JJ Hospital, Mumbai - 400 008.

Diagnosis of pulmonary embolism: progress after many YEARS

The decade that followed marked increased use of computed tomographic pulmonary angiography (CTPA), which has since been undergoing continuous technological improvement and is now established as the gold standard in pulmonary embolism diagnosis. However, even the most sophisticated and accurate test can yield useless or even misleading findings if done without a proper clinical indication. This is particularly crucial in the setting of suspected acute pulmonary embolism, in which individual symptoms and clinical signs are, as a rule, non-specific. To address this challenge, two complementary early diagnostic steps were developed and interfaced with CTPA in multistep algorithms: first, clinical prediction rules, which provide a semi-quantitative assessment of the pretest probability of pulmonary embolism based on the combination of predisposing conditions, symptoms, and clinical findings; and second, circulating D-dimer concentrations, a highly sensitive biomarker of onging fibrinolysis and thus, indirectly, thrombosis. The successful validation and excellent performance of strategies combining these elements with multidetector CTPA apparently closed the chapter on pulmonary embolism diagnosis 10 years ago.

Are diagnostic tests for suspected pulmonary embolism condemned to stagnation, being a victim of their own success? Tom van der Hulle and colleagues YEARS study, published in The Lancet, challenge this notion by showing that clinically meaningful adjustments are still possible. By combining three elements of the Wells' rule (ie, whether pulmonary embolism is the most likely diagnosis) with D-dimer testing in a single step, and by prospectively defining cutoff values for exclusive of pulmonary embolism without proceeding to an imaging test, van der Hulle and colleagues show that CTPA could be avoided in an additional 13% (95% CI 10-15) of the intention-to-diagnose patient population compared with standard algorithms.

The results of YEARS study are more than another technical refinement of existing algorithms.

Diagnosing clinically irrelevant or possibly even non-existent disease by uncontrolled use of CTPA has far-reaching implications. These consequences could range from unnecessary exposure to radiation and potentially harmful contrast medium to unacceptable diagnosis-related and treatment-related costs, to even serious or life-threatening bleeding complications of unjustified anticoagulation therapy.

Stavros V Konstantinides, The Lancet, 2017, Vol 390, 210-211