

Diagnostic capacity of tests used for knee examinations

Sir,

We read with great interest the article by Mr Davenport et al (vol. 77(3), 2016, p. C45). The authors outline the appropriate examination of a knee in an elective orthopaedic clinic, but they do not refer to the diagnostic capacity of these tests in isolation or combination.

The authors list numerous tests which can be used to identify ligamentous instability, but it is not clear whether one or all of these should be done. For anterior cruciate ligament rupture, the anterior drawer test provides a sensitivity of 9–93% (mean 62%, standard deviation 42%) and a specificity of 23–100% (mean 67%, standard deviation 23%), whereas the Lachman test has a sensitivity of 60–100% (mean 84%, standard deviation 15%) and specificity of 100% (Solomon et al, 2001).

The wide variability seen here reflects the few studies reporting the diagnostic capacity with small numbers of patients in each study. However, composite examination provides a superior diagnostic capacity with

a sensitivity of 82% and specificity of 94% (Solomon et al, 2001).

There is limited evidence available for posterior cruciate ligament rupture, but composite examination including posterior drawer test and abduction stress testing are thought to provide superior diagnostic capacity with a sensitivity of 91% and specificity of 98% (Solomon et al, 2001).

For meniscal injury the authors describe the McMurray's test (although not explicitly mentioned to be this) as a useful diagnostic tool. However, clinicians should be aware of the poor diagnostic capacity of this test with a mean sensitivity of 53% (standard deviation 15%) and mean specificity of 59% (standard deviation 36%). Further, the positive and negative likelihood ratios for McMurray's test may not influence the likelihood of underlying meniscal pathology (Solomon et al, 2001).

This aside, we commend the publication by Mr Davenport et al and we look forward to their future articles.

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Solomon DH, Simel DL, Bates DW, Katz JN, Schaffer JL (2001) The rational clinical examination. Does this patient have a torn meniscus or ligament of the knee? Value of the physical examination. *JAMA* 286(13): 1610–20 (doi: 10.1001/jama.286.13.1610)

Product news

New wireless ambulatory infusion system



Smiths Medical has launched the CADD-Solis pain management system with wireless communication capability in Ireland and the UK. This customisable infusion system provides two-way wireless communication of infusion data between the CADD-Solis pump and the PharmGuard Server software installed on the hospital's network to increase efficiency and safety, reduce costs and improve patient outcomes.

The CADD-Solis wireless system will allow hospitals to provide actionable reports when and where they are needed, and to deploy drug protocol libraries and software updates from the hospital's server

to the pumps. The wireless feature can be turned on or off without affecting pump delivery, and lack of a wireless connection does not impact pump delivery or data retention.

www.smiths-medical.com

Central Medical Supplies wins Scottish contract

Central Medical Supplies Ltd has won a contract to provide Mistral Air systems to all of the West of Scotland Consortium's hospitals.

The 37° Company's Mistral Air system is a 'forced air warming' system, which consists of an electrical blower that provides warmed air via a flexible hose to a permeable blanket draped over or under a patient. The warming blanket then distributes warm air to the patient safely and effectively to maintain normothermia. Managing hypothermia can help reduce the risk of surgical site infections and the length of hospital stay.

The Mistral Air system is suitable for use preoperatively, perioperatively, in post anaesthesia units or in intensive care units. It can also be used for head and neck surgery. There is also a wide range of blankets available making it suitable for all types of surgery.

Central Medical Supplies Ltd is the preferred supplier for the National Framework in Scotland following clinical trials of the Mistral Air system. Every product trial is tailored to each hospital trust, to ensure there is a specific solution geared to its individual needs. This unique offering was key to winning this latest contract.

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