Special tests

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/uni25CF Trendelenburg test (Figure 35.29). Face the patient and ask them to place their hands on the palm of your hands for support. Then ask them to stand first on one leg, then the other. Increased pressure from the opposite hand as they take weight through the weak hip indicates a posi - tive Trendelenburg test. /uni25CF Leg length discrepancy (LLD) . The inequality may be in the hip joint, femur, tibia, ankle or foot or a combina - tion of these. The pathology may be from the bone being too short or too long. When assessing LLD, square the pel - vis. If that is not possible then place both legs in the same position. For example, if there is an adduction deformity present in the a ff ected leg, place the good leg in the same deg ree of adduction. LLD can be caused by a real di ff er - ence in the leg lengths (the bones are di ff erent lengths) or by a deformity that makes the leg appear short because the pelvis must be tilted to get the leg onto the ground. The first is called ‘real’ LLD, measured ASIS to medial malle - olus. The second is called ‘apparent’ LLD, measured mid - line, e.g. xiphisternum to medial malleolus. Each di ff ers in cause and therefore treatment. T he LLD apparent to the patient can also be measured using wooden blocks placed under the patient’s ‘short’ leg until the patient feels level. /uni25CF Gait . Hip disease can present with an altered gait pat tern. The common types of abnormal gait are described in Table 35.11 (see also Summary box 35.8). /uni25CF Impingement . Two commonly performed tests relate to femoroacetabular impingement. The FADDIR test, per formed with hip flexion at 90° and subsequent adduction and internal rotation (F-ADD-IR) can reproduce the hip pain in impingement. The FABER test combines hip flex ion, abduction and external rotation (F-AB-ER) and can repr oduce hip pain in impingement but also pain from other locations, e.g. sacroiliac. Special tests

Collateral ligaments To assess the ligaments, place the leg under your arm. Flex the knee to 30° (not more) to relax the posterior capsule (the MCL and LCL are taut in full extension and lax in flexion). Stress each ligament in turn by applying a valgus or varus force. With your index fingers simultaneously palpate over the collateral ligaments. Assess for signs of instability (excessive opening of the joint). The quality of the end point should be noted (is it firm or spongy?). Compare both sides (Figure 35.31). /uni25CF Medial collateral ligament . A lax MCL or deficient lateral compartment may cause knee instability when applying a valgus stress. It is important to note that the valgus stress test should be applied with the knee in 30° of flexion. Valgus instability in full extension (0°) should alert you to a possible posterior structure injury (e.g. posterior capsule, PCL). /uni25CF Lateral collateral ligament . A lax LCL or deficient medial compartment may cause knee instability when applying a varus stress in 10° of flexion. Instability in full John W Lachman , 1919–2007, Professor and Chairman of the Orthopedic Department at Temple University in Philadelphia, PA, USA. extension (0°) suggests injury to the posterior structures. In a suspected lateral injury , evaluation of the peroneal nerve must be performed.

(d) Figure 35.32 Lachman’s test: /f_l ex the knee to 15–30° and pull the proximal tibia forwards.

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