This study examines the effect of isolated vastus medialis strengthening in pain reduction.

**Material and method.**—Fourteen persons with PPS were assessed for patellofemoral joint contact area and the patellar tilt angle by using X-rays. All subjects underwent a specially designed isolated vastus medialis strengthening program for 6 weeks, 3 times/wk. All subjects were given a numeric pain score (1–10) at the beginning and at the end of the strengthening program.

**Results.**—Although all subjects reported pain reduction of the anterior knee pain ($P < 0.001$) no significant changes were observed concerning the patellar tilt angle in the X-ray control.

**Conclusion.**—Isolated vastus medialis strengthening can result in pain reduction in PPS. Radiographic changes in patellar tilt angle may need more time since these changes are due to long established muscles imbalances.

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**P105-e**

**Effectiveness of back school program in lower back pain**

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**Keywords:** Back school program; Back pain; Disability

**Introduction.**—The aim of this study is to evaluate the effectiveness of a back school program (BSP) to improve pain and disability in patients with low back pain.

**Methods.**—Prospective observational study (January–March 2013) involving 102 outpatients with low back pain classified in: back school’s group (BSG): kinesitherapy ± electrotherapy + BSP; -control group (CG): kinesitherapy ± electrotherapy. Scales: Visual Analogic Scale (VAS), Oswestry’s disability index (ODQ), Fear-Avoidance Beliefs Questionnaire (FABQ), Statistical analysis (SPSS20).

**Results.**—Median age: 57 years; 94.2% chronic low back pain and 76% taking analgesics (both groups similar). Previous rehabilitation (BSG/CG): 80.4%/61.5%. Surgery (BSG/CG): 13.7%/3.8%. Laboral activity (BSG/CG): 46%/73.1%worked, 36%/17.3%retired, 14%/9.6% sick leave, 4%/8% unemployed.

After treatment, in both groups we found improvement of pain (VAS), disability (ODQ) and a decline in the influence of psychosocial factors in pain (FABQ). However, in BSG these results were statistically significant (FABQ $P < 0.05$; ODQ $P < 0.01$). In BSG, 98% of patients were satisfied with BSP, 86% decreased analgesic consumption, 63% modified physical activity (27.4% CG), 78.4% reported that they have decreased the number of visits, 64% of sick leave patients returned to work.

**Discussion.**—Applying back school program together with conservative physical treatment is more effective than only applying the later in back pain treatment, in terms of pain and disability.

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**P107-e**

**Symptomatic accessory navicular bone: A case series**

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**Keywords:** Accessory navicular bone; Symptomatic; Flat foot

**Introduction.**—Accessory navicular bone is a rare cause of acquired flat foot. Diagnosis is often delayed resulting in chronic pain and deformity. Three cases of acquired flat foot that were diagnosed after significant delay are presented.

**Observation.**—Three young patients from military background presented with 1 year history of progressively increasing pain and swelling in one of the feet after prolonged physical activity and standing. There was no history of trauma or rheumatologic disorder. On examination, they had mild swelling, tenderness in the medial aspect and flattening of medial longitudinal arch. X-rays of the foot revealed an accessory navicular bone (types II, III). MRI revealed partial tear of tibialis posterior tendon in two cases. Rest of their baseline investigations were normal. They were advised rest, NSAIDs and modified footwear. Pain and swelling improved.

**Discussion.**—Accessory navicular bone is present in 40–80% of population but it does not always become symptomatic. Mostly, it remains unnoticed until it causes pain and swelling resulting in chronic foot pain and then to flat foot. It is diagnosed on radiographic evaluation, although CT/MRI scan is also very helpful. Its treatment is both conservative and surgical, later reserved for resistant cases and young.

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**P108-e**

**Interest of botulinum toxin for preoperative diagnosis test in the piriformis muscle syndrome**

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**Keywords:** Piriformis muscle syndrome; Botulinum toxin; Sciatic nerve neuralysis

**Introduction.**—The intramuscular injection of botulinum toxin (TBX) is effective in the treatment of the piriformis muscle syndrome (PMS) [1], but the effect remains passing. We suggest using it in diagnostic aim before proposing a surgical gesture.

**Method.**—Ten patients followed in the CHU of Strasbourg, presenting a PMS, answered initially the injection of TBX, having led secondarily to a surgical care were included.