Surgical Outcome of Pincer Femoroacetabular Impingement With and Without Labral Ossification
J. W. Thomas Byrd, M.D., Kay S. Jones, M.S.N., R.N., Carl R. Freeman, M.D.

Purpose
To describe the clinical findings associated with labral ossification (LO), report the outcomes of arthroscopic treatment, and compare this condition to a control group with femoroacetabular impingement (FAI).

Methods
A retrospective review of hip arthroscopy patients from 2004 to 2013 was performed to identify patients with a diagnosis of pincer FAI with LO and at least 2 years of follow-up. Diagnosis was made by plain radiograph, computed tomography, magnetic resonance imaging, or intraoperatively. The LO cohort was compared to a chronologically matched control group of FAI patients with pincer FAI but no LO. Patients were prospectively assessed with modified Harris Hip Score (mHHS) preoperatively and then postoperatively at 3, 12, 24, 60, and 120 months.

Results
The LO group included 56 hips in 52 patients whereas the control group included 56 hips in 56 patients. Mean follow-up was 36 months for the LO group and 38 for the control group ($P = .28$). Patients in the LO group were older than those in the control group, with a mean age of 45 versus 30 years ($P < .0001$), and had more women: 58% female versus 32% male ($P < .0001$). The LO group patients were more likely to have pain while sitting (65% v 18%) and restricted activities of daily living (40% v 11%) than the control group ($P < .0001$), and more likely to have pain during a flexion, abduction, external rotation (FABER) test (67% v 36%) ($P = .002$). Both groups experienced a similar magnitude of improvement in mHHS, but the LO group had a significantly lower preoperative mHHS (49 v 63, $P < .001$) and final postoperative mHHS (75 v 87, $P < .0001$) than the control group.

Conclusions
Patients with LO represent a unique subset of pincer FAI and are more likely to be older, female, and have more severe symptoms. Hip arthroscopy can be used to treat LO with excision of the ossified fragments or rim, with a reasonable expectation of improvement of symptoms.

Level of Evidence
III, retrospective case-control.