

stages. Records of any changes in traction graph were noted for the duration of surgery.

Results: 30 patients, 17 female and 13 male were reviewed. Females needed a lower average traction load of 2.6kg vs men at 4,2kg. With loss of negative pressure and air insufflation 15 cases exhibited an acute drop in traction load. Only 11 of these had an increase in joint gapping and 8 of these had air beyond the zona orbicularis. 15 cases had no acute changes with 4 in this group showing slight increased gapping with loss of negative pressure and only 2 had air beyond the zona. No acute drops in load were noted during interportal capsulotomy.

Conclusion: Graphic traction load monitoring indicates that females need less traction than men. Breaking the zona fluid seal appears to increase the joint gap and lessen traction load thus alluding to its function as an important secondary stabilizer. Interportal capsulotomy has no effect on joint gap or traction load perhaps because the zona is intact.

Paper #6

INFORMATION GAINED FROM THE USE OF TRACTION GRAPHS DURING HIP ARTHROSCOPY

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FDA Status: Not Applicable

Summary: Traction during hip arthroscopy represented graphically is a useful monitoring tool and may also provide insight into the function of capsular structures affected by the surgical steps of hip arthroscopy.

Aim: To correlate traction graph changes with initial routine steps to gain entry into the central compartment of the hip under arthrography and fluoroscopic guidance. To draw possible conclusions from these observations.

Method: Routinely traction is monitored by a load cell and graphically represented with load in kg's(y-axis) and time per second (x-axis). An arthrogram is performed with examination under anaesthetic prior to traction application. Fluoroscopic guidance assists entry into the hip and pictures are taken prior to and after needle entry with release of negative pressure, followed by insufflation of 50 - 60cc air under pressure. Records were made of changes in traction load and if the air travelled beyond the zona orbicularis. Joint gap distance measurements were made at these