

## Arthroscopic Treatment Of Discoid Lateral Meniscus

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The prevalence of peripheral rim instability in discoid lateral meniscus is reported 28.1% by Klingele (2004) and 77% by Good (2007). Peripheral rim instability is diagnosed if it was possible to bucket or evert the meniscus with a probe after saucerization (Good 2007). Authors believe that the peripheral rim instability is caused by incomplete or complete peripheral longitudinal tear in discoid meniscus. It is important to evaluate rim stability at preoperative planning or before saucerization.

We analyzed preoperative MRI and arthroscopic findings in 76 knees with discoid lateral menisci, and classified into 4 categories: 1) no shift when discoid meniscus has no peripheral longitudinal tear, 2) postero-central shift when the entire discoid meniscus is displaced postero-centrally due to a peripheral longitudinal tear at anterior horn, 3) antero-central shift when the entire discoid meniscus is displaced antero-centrally due to a peripheral longitudinal tear at posterior horn, and 4) central shift when discoid meniscus is displaced to intercondylar notch due to a long peripheral tear around popliteal hiatus. This MRI classification is useful to evaluate rim instability and to choose the appropriate arthroscopic surgery.

Asymptomatic discoid meniscus showing no meniscal tear on MRI does not require surgical treatment. But it has been reported that untreated symptomatic discoid meniscus may lead to early osteoarthritis. Indications of arthroscopic surgery are symptomatic discoid meniscus, such as typical snapping, limitation of full extension, or swelling. Arthroscopic partial meniscectomy is performed on meniscal tear in no shift type. Arthroscopic meniscal repair and partial meniscectomy is indicated for shift types of discoid meniscus. It is better to perform partial meniscectomy after reducing the displaced discoid meniscus to anatomic position with repair. Peripheral tear located at anterior horn or mid body is repaired with modified outside-in technique and tear located at posterior horn is repaired with all-inside suturing technique. Arthroscopic subtotal and total meniscectomy are performed in central shift type of tear which usually present in a chronic state with unrepairable meniscus tissue. Arthroscopic total meniscectomy is rarely performed when meniscal tear involved the entire meniscus without stable peripheral rim.