Can Hip Arthroscopy be Performed with Conventional Knee Length Instrumentation?

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Purpose

To quantify the depth of the joint at three targeted points in the hip through two primary portals utilized during hip arthroscopy
Materials and Methods

- 116 consecutive hip arthroscopies (104 patients) were included in this study.
- Age, hip laterality, height (in), weight (lbs), BMI and a subjective assessment of body type (1. muscular, 2. somewhat overweight, 3. overweight, 4. thin, 5. normal) were recorded.
- Depth from the skin at two portal sites to 3 commonly accessed positions (12 o’clock, 3 o’clock and acetabular fossa) was assessed using a guide with marked notches (in millimeters).
- Subgroup analysis was performed according to BMI and subjective biotype for each patient.
Materials and Methods

Intraoperative measurements at fovea-12 and 3 o clock position
Results

• 104 patients were included
• Mean age of 35 years (range 14 – 55 years)
• Patients were categorized according to BMI:
  – 60% were normal, 22% were overweight, 16% were obese and 2% were underweight.
• All but 8 procedures were performed with conventional length arthroscopic shavers and burrs.
  – The eight procedures that needed additional hip instrumentation were patients who required LT (ligamentum teres) debridement or those with IP (iliopsoas) tenotomy.
• Overall, the distance from skin to socket was <11 cm at 12 o’clock and 3 o’clock positions from both anterolateral and anterior portals.
• Obese and overweight patients had statistically longer distances from skin to socket at all 3 measurements points compared to underweight and normal patients.
Difference in length of Hip Instrumentation vs Conventional Knee length

Conventional Knee Length Instrumental Tools: 11-13cm
Hip Length Instrumental Tools: 19 cm
Conclusion

• The distance from skin to socket at 12 and 3 o’clock positions is less than 11cm, suggesting that hip arthroscopy can be usually performed with conventional knee length instrumentation devices.

• In obese and overweight patients and patients requiring LT debridement or IP tendon release specific hip arthroscopic tools should be available.
References

Thank You

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