Postless arthroscopy a safer alternative for hip surgery

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Video Abstract

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Abstract

Most arthroscopic procedures of the hip involve a perineal post. Positioning patients against this padded column gives surgeons access to the area in need of repair. But a new concept is seeing clinicians go postless. While seemingly gentler on the patient, the effects of this innovation on muscles, nerves, and blood flow had never been captured—until now. New research indicates that this postless approach is a safer arthroscopic alternative that can reduce the risk of unwanted surgical complications. The use of a post in hip arthroscopy poses a risk of complications such as skin tearing, nerve injury, and sexual dysfunction. While past research has proposed that the risk of these complications is relatively low, usually less than 1.5%, new evidence suggests that the number might actually be closer to 25%. For an elective procedure performed mostly on young athletes, that's a signal for much-needed improvement. To find out whether postless arthroscopy might offer a less risky alternative, researchers monitored blood flow, nerve activity, muscle damage, and groin soft tissue complications in 35 patients before, during, and after surgery without a perineal post. Overall, the results were positive. Blood flow did not vary significantly between operative and nonoperative legs for either the common femoral vein or popliteal vein. Levels of creatine phosphokinase and D-dimer, markers of muscle and soft tissue damage, were lower than those previously reported for patients undergoing hip arthroscopy with use of a perineal post. Nerve signals stimulated by brain or sensory activation were similar to, if not less altered than, reported nerve changes in hip arthroscopy using a post. And they returned to baseline by the end of surgery. This was the case even though the operating time was more than twice as long. Finally, and importantly, zero perineal injuries were observed, providing the key motivation for transitioning to this technique. One limitation of the study is the lack of a control group for direct comparison, as use of a perineal post is not part of the team's standard of care. But their findings are encouraging. Together, they support hip arthroscopy without a perineal post as a safe alternative.