Sports Medicine
Literature Matters

Traction-related problems after hip arthroscopy

Frandsen L, Lund B, Nielsen RG, and Lind M
Journal of Hip Preservation Surgery 4(1): 54–59, 2017.

Top Level Summary:

The purpose of this prospective study was to describe traction-related problems and how patients perceive these problems. **Traction-related problems after hip arthroscopy are a challenge and this study showed that 74% of patients reported traction-related problems. This is significantly higher than previously reported.**

Methods:

This descriptive cohort study prospectively followed 100 patients (60 female: 40 male; mean age was 37 years; range 18-65) undergoing hip arthroscopy. Surgery was performed with all patients in the supine position on a standard fracture table with a perineal post. The amount of traction was set as low as possible and was kept under 2 h, as recommended in the literature. Data was collected from questionnaires and patient files. The questionnaire included questions on patients' perceptions of traction-related problems in the groin area, at the knee, and ankle, and how patients had coped with these problems.

Furthermore, three female and three male patients who reported traction-related problems were randomly selected for an interview. The interviews were conducted 6 weeks post-operatively and were designed to give a deeper understanding of how these patients perceived their traction related complications.

Results:

Table 1 summarizes the types of traction-related problems reported in the groin, knee, and ankle. Out of the 100 patients that underwent hip arthroscopy, 74% reported some sort of traction-related problems post-operatively, and many patients reported more than one problem (Fig. 1 & Fig. 2). Complications ranged from minor (VAS score < 3) to severe (VAS score > 7), and most were resolved in 2-4 weeks, although a few persisted for months following surgery (Table 2). Patients reported the worst pain within the first 10 days post-operatively. The interviews showed that the patients experienced a lack of information regarding problems, duration of the problems and how to manage them. They also expressed a need for dialogue about these problems with the health care staff.

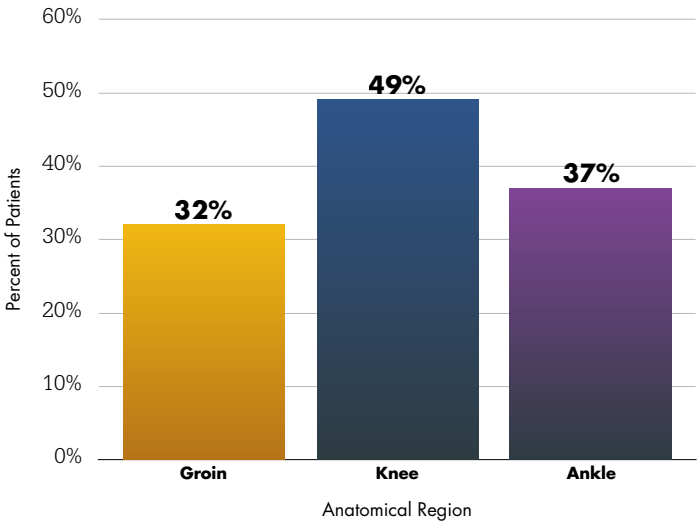

Figure 1. Percent of patient reported traction-related problems after hip arthroscopy.

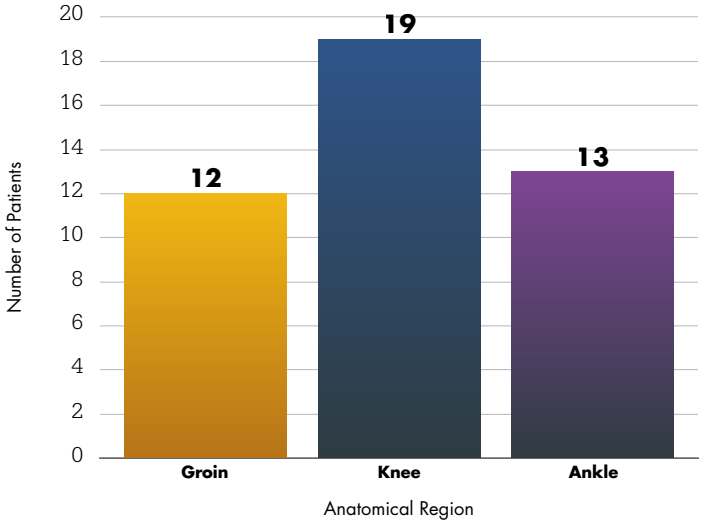

Figure 2. Number of patients reporting more than one traction-related problem after hip arthroscopy.

Table 1. Symptoms experienced by patients that reported traction-related complications.

Symptoms	Anatomic Region		
	Groin	Knee	Ankle
Swelling and/or hematoma	✓	✓	✓
Stinging, aching, or stabbing pain	✓	✓	✓
Numbness or sensory disturbances	✓	✓	✓
Reduced sexual activity	✓		
Laxity		✓	
Pressure spots from the traction boot			✓

Table 2. Severity and duration of traction-related problems.
VAS Scale from 0 to 10 where 0 indicates no pain and 10 indicates worst possible pain.

Anatomic Region	Average VAS	Number of patients reporting VAS > 4	Number of patients with problems persisting after 1 month (duration)
Groin	2.6	7	3 (2 months)
Knee	3.3	13	5 (3 months)
Ankle	3.4	10	2 (3 months)

Clinical Relevance:

Traction-related problems after hip arthroscopy occur in a large number of patients but are often unreported. In general, this is often because problems are minor or patients simply leave them to resolve on their own. For example, traction forces on knee ligaments may lead to the feeling of laxity, and traction boots may cause pressure spots and pressure on nerves in the ankle. Additionally, patients may be too embarrassed to discuss certain complications with their surgeon, particularly those in the groin area.

This study showed that 74% of patients reported traction-related problems, which is significantly higher than previously reported. Moreover, this study found that there is a rather high rate of complaints from the knee and ankle joints which have not been emphasized in previous reports. To minimize traction problems, it is important to pay attention to preventive measures. The amount of traction and total traction time must be kept to a minimum. Lastly, it is important to not only be aware of any previous lower extremity joint injuries, but presented data suggests the need for more pre-surgery patient information about possible traction-related problems.

5670 Greenwood Plaza Blvd. Ste. 200
Greenwood Village, CO 80111
t: 201 831 5000
www.stryker.com
www.sportsmedicine.stryker.com

1000902514 Rev A