



Hip Arthroscopy and Peri-Acetabular Osteotomy: Same Day vs Different Day Surgical Outcomes

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Introduction

- Developmental Dysplasia of the Hip (DDH) is a disorder of abnormal formation of the ball and socket joint of the hip.
- One of the most common disorders of newborns but can also have a delayed adolescent presentation.
- General hip pain is their primary symptom
- Patients can help control pain with Physical Therapy, NSAIDs, and activity modification
- Definitive treatment is a combination of surgeries to treat damage to surrounding structures and reconfiguration of the dysplastic acetabulum
- Hip Arthroscopy is a non-invasive procedure used to view the hip joint and treat injuries identified such as FAI, labral tears, synovitis, joint infection, and loose fragments within the joint^{1,6}.
- Periacetabular Osteotomy (PAO) is a surgery that cuts the pelvic bone to reposition the acetabulum in the pelvis to cover the head of the femur more fully



Pre-Op



6 months post-op

Objective

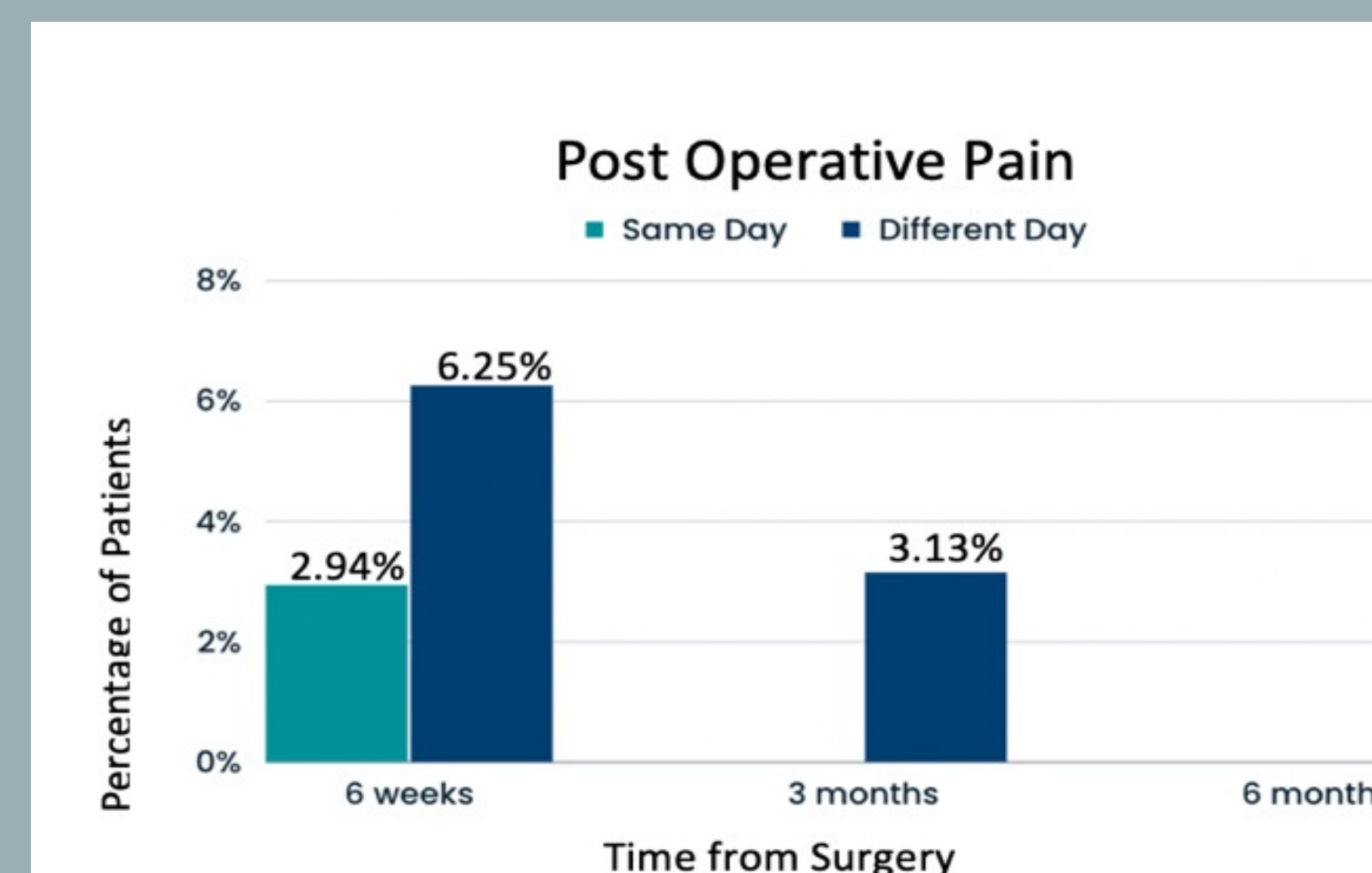
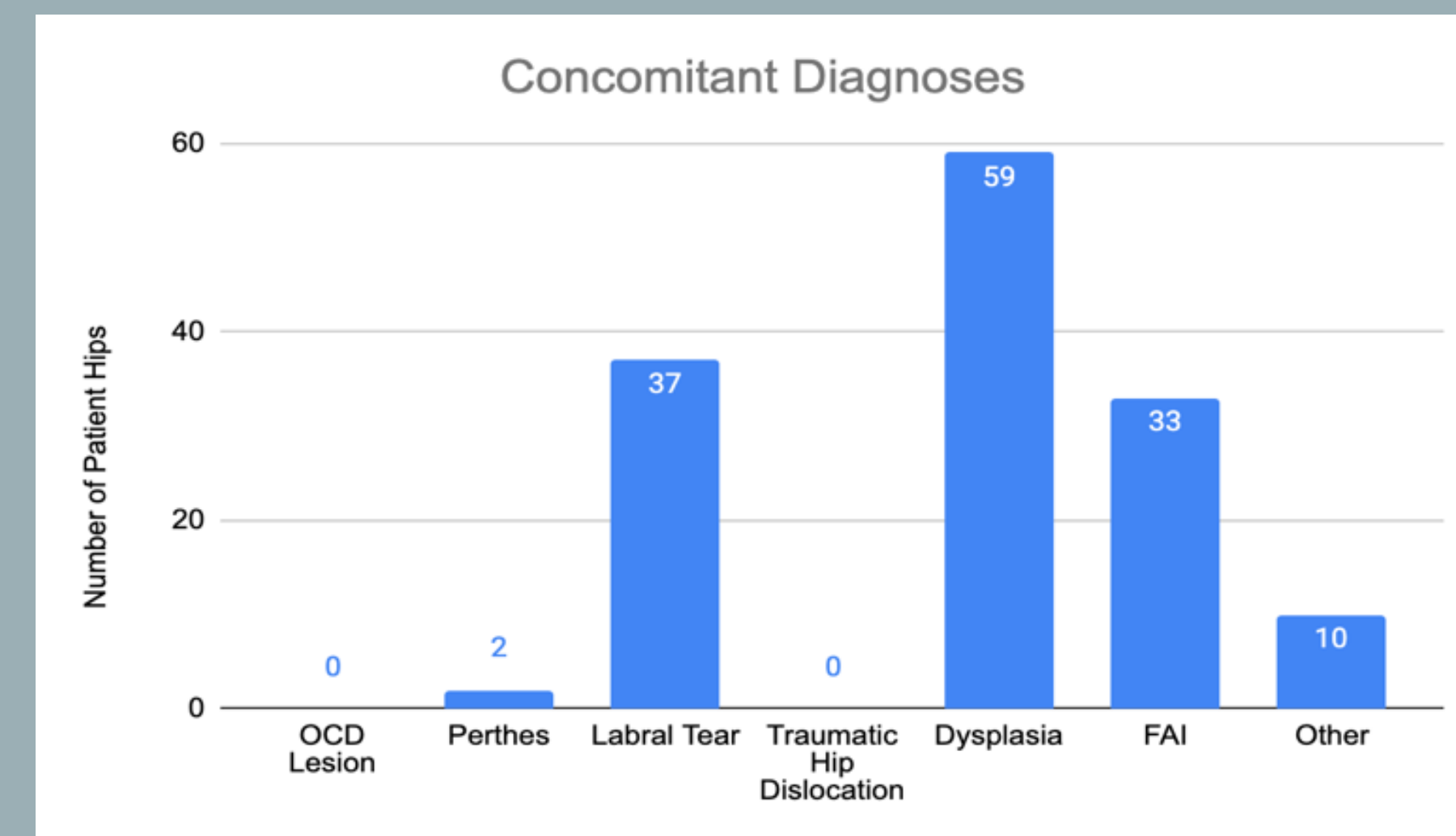
Evaluate the treatment of adolescent hip dysplasia and concomitant diagnosis by identifying long-term between adolescent patients who undergo hip arthroscopy and PAO on ipsilateral hip on the same date vs. different date such as

- Duration and location of pain
- Return to activity
- Complications
- Gait analysis

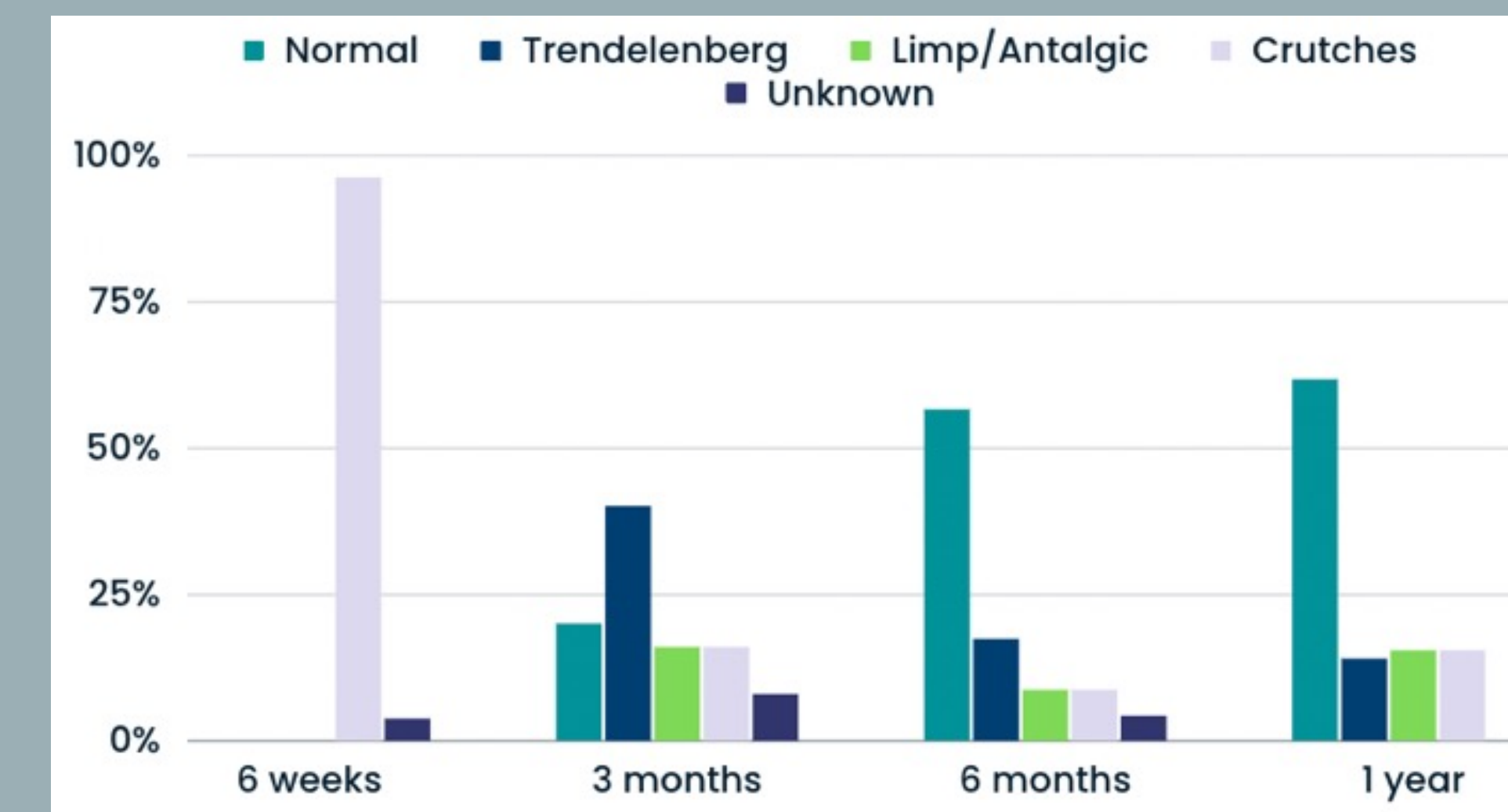
Methods

- Retrospective chart review of patients who received a hip arthroscopy and PAO at Children's Hospital Colorado and University of Colorado Inverness hip preservation team.
- 62 hips from 52 patients between 14-22 years old who received arthroscopy/PAO on the ipsilateral hip either on the same day or on different days
- RedCap used to record and analyze data

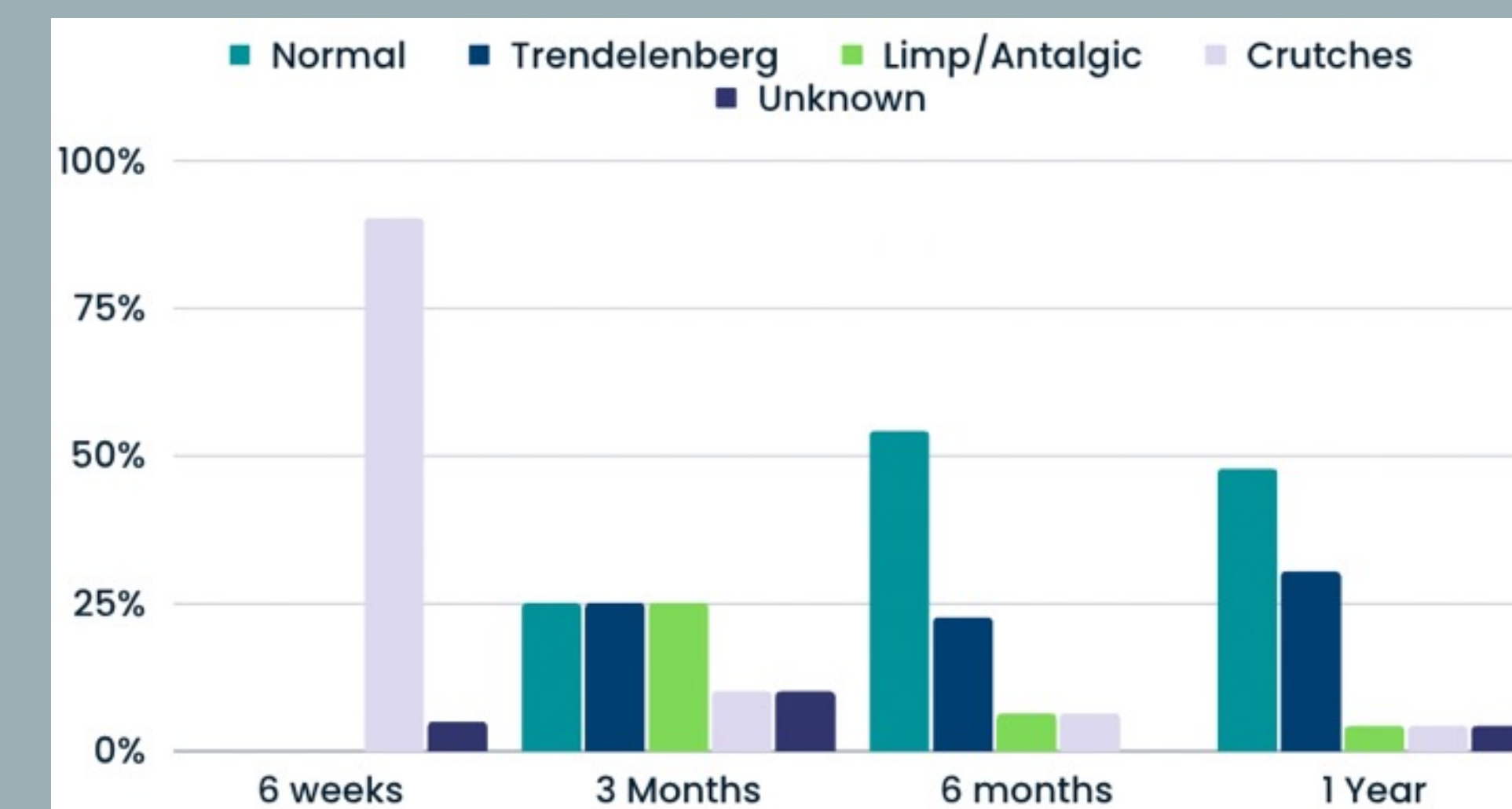
Results



Results Continued



Same Day Gait Analysis



Different Day Gait Analysis

| TIME FROM SURGERY | SAME DAY | DIFFERENT DAY | P-VALUE |
|-------------------|-----------------------|-----------------------|---------|
| 6 WEEKS | Inactive: 15 | Inactive: 15 | .926 |
| | Sometimes Mild: 12 | Sometimes Mild: 10 | .612 |
| | Regularly Mild: 2 | Regularly Mild: 2 | .973 |
| | | | |
| | | | |
| 3 MONTHS | Inactive: 2 | Inactive: 1 | .583 |
| | Sometimes Mild: 9 | Sometimes Mild: 8 | .861 |
| | Regular Mild: 11 | Regular Mild: 10 | .886 |
| | Sometimes Moderate: 2 | Sometimes Moderate: 6 | .144 |
| | Regular Moderate: 6 | Regular Moderate: 4 | .561 |
| | Regular Regular: 1 | Regular Regular: 0 | .325 |
| | Sometimes Impact: 0 | Sometimes Impact: 1 | .325 |
| | | | |
| | | | |
| | | | |
| 6 MONTHS | Sometimes Mild: 2 | Sometimes Mild: 1 | .479 |
| | Regular Mild: 0 | Regular Mild: 5 | .037 |
| | Sometimes Moderate: 2 | Sometimes Moderate: 5 | .947 |
| | Regular Moderate: 10 | Regular Moderate: 7 | .300 |
| | Regular Regular: 5 | Regular Regular: 5 | .814 |
| | Sometimes Impact: 5 | Sometimes Impact: 6 | .955 |
| | Regular Impact: 1 | Regular Impact: 3 | .393 |

Conclusion

- No significant difference in same day vs different day outcomes
- The recovery period is key in success of relief of pain
- There are minimal risks to the surgeries, patients showed quick and adequate relief of pain by three months, and consistent return to activity

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