VIA University College

Research Centre for Health and Welfare Technology

Feasibility and acceptability of a six-month exercise therapy and patient education intervention for patients with hip dysplasia not eligible for surgery

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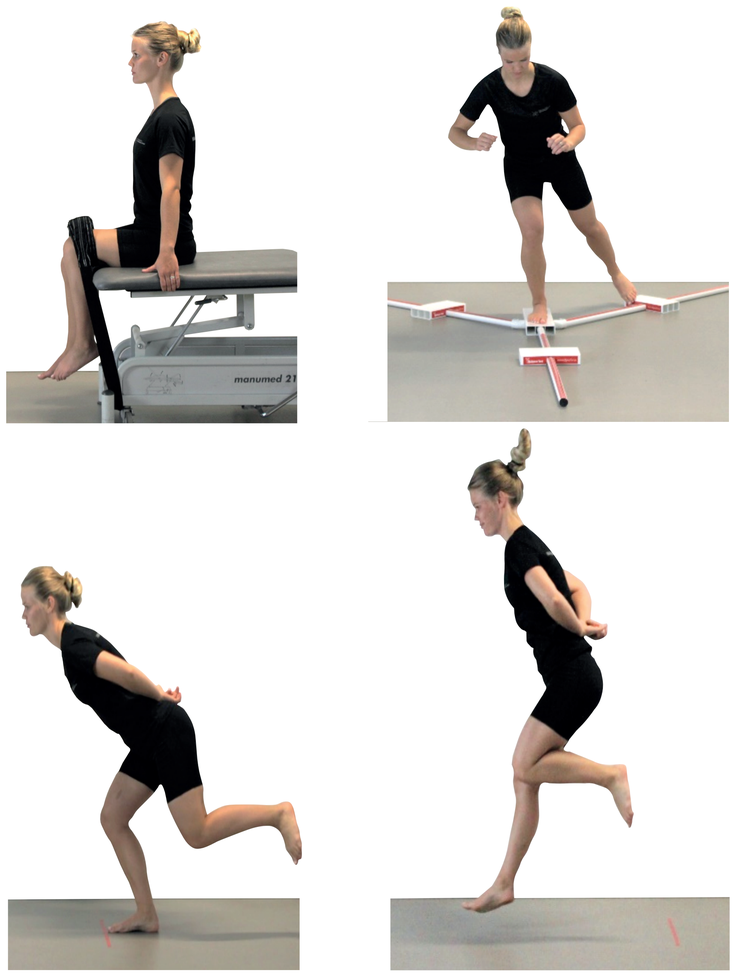

Figure. Tests illustrating muscle strength test, Y-balance test and hop for distance test.

Introduction

Hip dysplasia	Surgically treatable
Surgery	Not offered to or accepted by all patients
Exercise	Lack of knowledge for patients not eligible to surgery
Aim	Evaluate feasibility and acceptability of a 6-month exercise and patient education intervention for patients with hip dysplasia not eligible for surgery

Patients and methods

Setting	30 patients with hip dysplasia
Design Procedure	Feasibility study with 6-month follow-up. Feasibility covered inclusion, retention, and mechanisms of impact. Mechanisms of impact were evaluated as change in Hip and Groin Outcome Score (HAGOS), hip strength, Y-balance test and hop for distance test (HDT) over a six-month period. Acceptability covered adherence, expectations, perceptions, benefits and harms.
Intervention	6-month exercise and patient education with 8 supervised sessions and scheduled exercise sessions three times per week

Results

Feasibility

Inclusion	30 of 32 patients (median age: 30 years)
Retention	24 patients completed 6-month follow-up
Impact	HAGOS pain improved mean 11 (95%CI: 5-17) points, other subscales ranged 1-11 points. Hip abduction strength improved mean 0.2 (95%CI: 0.04-0.4) Nm/kg, similar to flexion and extension. Median Y-balance test improvements: Anterior: 70 (IQR: 64-74) to 75 (IQR: 72-80) cm (p<0.001) Posteromedial: 104 (IQR: 94-112) to 119 (IQR: 112- 122) cm (p<0.001) Posterolateral: 98 (IQR: 89-109) to 116 (IQR: 108-121) cm (p<0.001) Median HDT improvements: 37 (IQR: 30-44) to 52 (IQR: 45-58) cm (p<0.001)

Acceptability

Adherence	84% of scheduled exercise sessions (1581:1872)
Expectations	To intervention were met
Perceptions	High self-efficacy for exercise
Benefit	High perceived value of intervention
Harms	No serious reported

Conclusion

Patients are willing to be included for a six-month exercise and patient education intervention.

The patients retention was acceptable.

Mechanisms of impact through improvements in pain, strength and function were found with high intervention acceptance.

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