

Does Total Hip Arthroplasty in Paediatric Patients Improve their Quality of Life?

Jonathan Barrow

Anne Foster

Mo Kenaway

Tim Board

Background

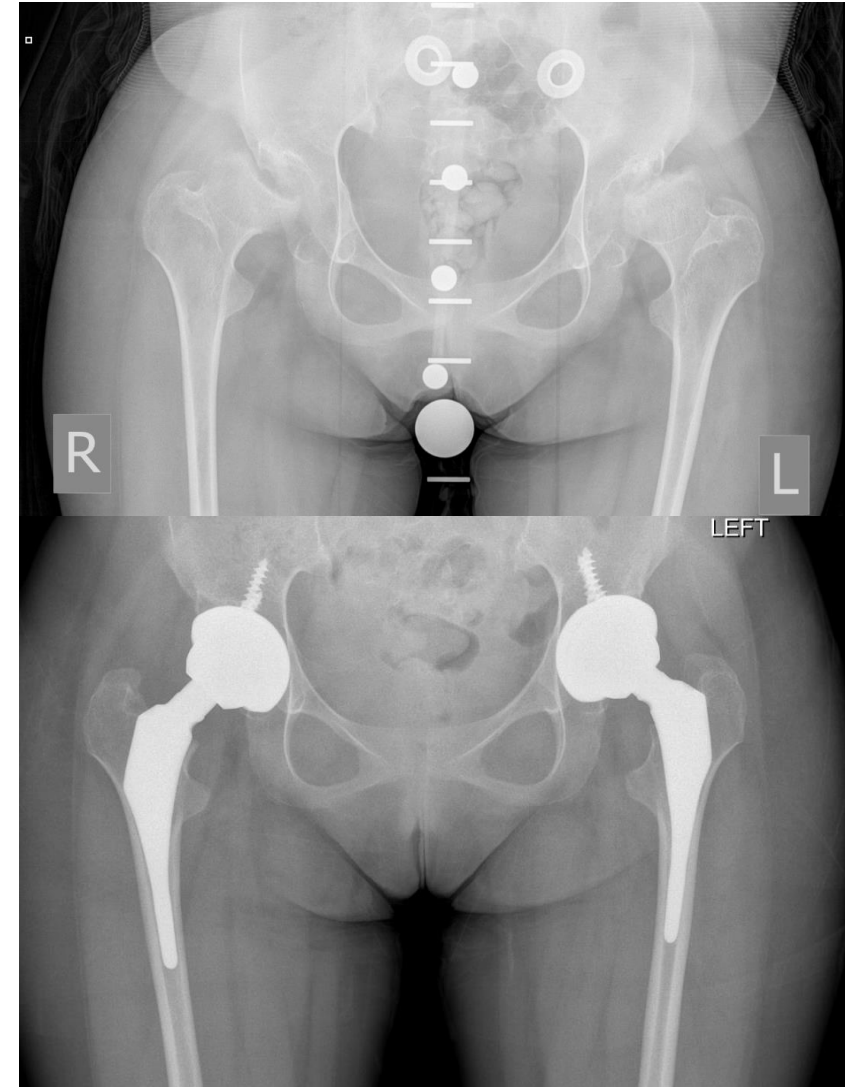
- THA in a child is complex and the surgery challenging
- Pre-operatively patients' typically have significant pain and mobility restriction
- Little is published on the functional gains after THA in this group
- The aim of this study was therefore to measure the impact THA had on the PROMS in our young patients undergoing THA
 - To determine QoL improvement.

Methods

- This was a prospective, consecutive cohort study
- Patients under the age of 17 years undergoing THA
 - All operations joint cases Arthroplasty surgeon & Paediatric Orthopod, undertaken at Royal Manchester Childrens' Hospital
- Data
 - Patient electronic notes
 - Radiographs
 - PROMS (EQ5D-Y, Oxford Hip Score (OHS) and modified Harris Hip Score (mHHS))

Results

- 12 children (8 females and 4 males)
 - THA before their 17th birthday
 - 5 undergoing bilateral
 - 17 THA total
- Mean age was 14.6 years (10.75-16.9)
- Mean follow-up 1.7 years
- Nine of the THA for congenital syndromes
 - 4 for AVN
 - 2 for Perthes disease
 - 1 for dysplasia and idiopathic chondrolysis



Results

- All patients achieved MCID or higher for OHS

Mean	OHS	EQ VAS	mHHS
Pre-op	15 (1-33)	35 (8-100)	25 (0-56)
6 weeks post-op	31(19-39)	73 (55-96)	60 (37-92)
1 year post-op	44 (42-46)	84 (76-96)	65 (38-84)
3 years post-op	48 (47-48)	92 (76 -100)	91 (91)

- 6 patients were wheelchair users preop
 - All patients were independent walkers at follow-up
- There were no complications

Quote from Lily's Mum

"...this was the first time she had really messed around on the beach with her friends, *previously she would have remained sat on a blanket watching*. And she certainly would never have been in a position to bend and stretch and balance to help decorate! Sleepovers at friends had become a distant memory until this point as well, now I *can't keep her at home as she no longer has to worry about climbing stairs and sleeping on floors etc!* Standing to cook was a revelation to her as well as previously she would have done it sitting at the table. *They are all little things but the difference to the quality of life both for her and for us as a family has been truly immeasurable...."*



Summary

- THA in children is safe
- It positively impacts on QoL
 - Validated with PROMS scores
- Wheelchair users can reliably gain independent walking
- Further follow-up is required understand the long-term outcomes