



Introduction

- Hemarthroses, if inadequately managed, can result in long term joint damage, pain and disability in patients with Hemophilia (Bolton-Maggs & Pasi, 2003; Hilliard et al, 2006)
- Joint assessment includes checking for swelling, pain, heat and reduced range of motion at the first sign of a bleed and throughout the course of resolution (Srivastava et al, 2013)
- Lack of parent and patient knowledge of joint bleed recognition and assessment may result in delayed initial treatment and prolonged treatment times and resolution
- In British Columbia, many families live far away from the Hemophilia Treatment Centre (HTC) and often rely on telephone and/or email as the main form of communication
- Face to face review visits may only occur one to two times per year, limiting the number of teaching opportunities

Objective

- To explore the use of video as a medium to teach patients and families about joint assessment

Methods

- A series of videos was developed by:
- Conducting an informal learning needs assessment through unstructured interviews of parents of children with Hemophilia
 - Multidisciplinary discussion of clinical observations and perceived knowledge gaps
 - Consultation with an external media production company to determine the style and format of media that would most effectively convey the desired information and engage the target audience

Results

- Nine videos were created, each showing the assessment of one of three joints (ankle, knee and elbow) in three pediatric patients of different ages (adolescent, child and toddler)
- Videos show HTC Physiotherapist guiding a parent and child through a joint assessment in the context of a possible hemarthrosis
- In order to simplify the instructional components of the videos, the assessment was broken down into steps which were then categorized into 4 parts:
 - Look:** observe for swelling, redness and alterations in movement or use of the affected joint
 - Feel:** palpate for heat, tenderness and swelling (tense or spongy feel)
 - Move:** assess range of motion and identify the presence of pain with movement or overpressure
 - Call:** encourages the family to contact the HTC and provides contact information
- Sequence of steps forms the “Look, Feel, Move, Call” Method of joint assessment that is taught in the videos
- Videos highlight the importance of communication with the HTC with the intent of increasing parent self-efficacy in communicating their assessment findings and improving communication around factor treatment and re-assessment throughout the course of bleed resolution

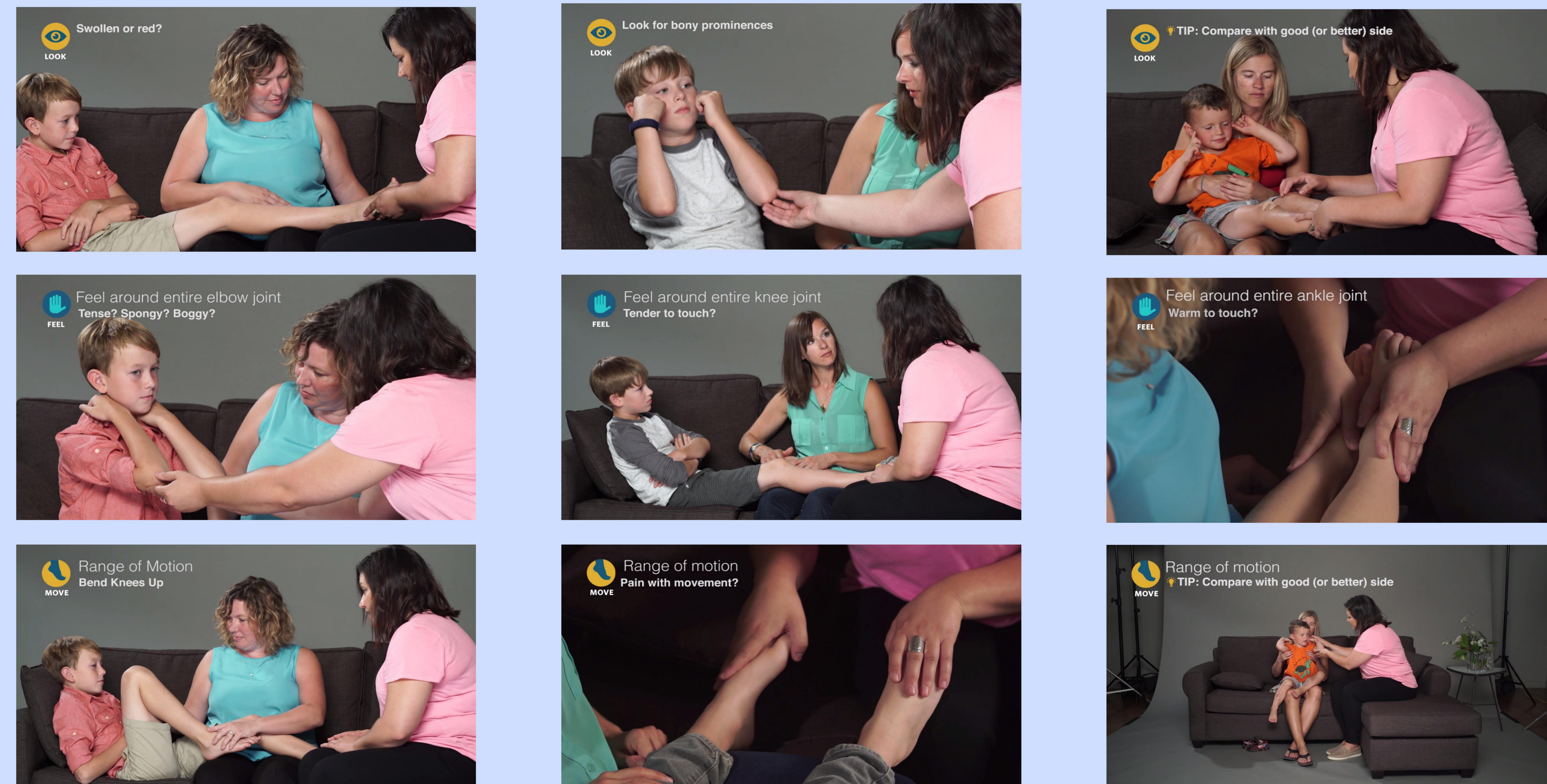


Figure 1. Series of nine videos demonstrating the “Look, Feel, Move, Call” method to assess three joints (ankle, knee and elbow) in three pediatric patients of different ages (adolescent, child and toddler).

Joint Assessment Ankle, Knee & Elbow


	LOOK	<ul style="list-style-type: none"> • Swollen or red? • Look for bony prominences • Ankle/Knee: Limp? Walking on toes or foot turned out? • Elbow: Decreased use/movement of arm? • Compare with good (or better) side
	FEEL	<ul style="list-style-type: none"> • Warm to touch? • Tender to touch? • Tense or spongy? • Compare with good (or better) side • Knee: feel front of knee, above and around knee cap • Ankle/Elbow: feel around entire joint
	MOVE	<ul style="list-style-type: none"> • Range of motion • Pain with movement? • Pain with overpressure? • Compare with good (or better) side • Knee/Elbow: can it bend/straighten fully? • Ankle: can it point and flex fully? Can it lift as high as other foot (with knee bent)?
	CALL	<ul style="list-style-type: none"> • Hemophilia clinic: 555-555-5555 (Monday to Friday 0830-1630) • Hematologist on call: 222-222-2222 (after hours/weekends)

Figure 2. The “Look, Feel, Move, Call” method of joint assessment.

Conclusion

- Joint assessment videos may be an effective means of knowledge translation and streamlining care for families and patients with hemophilia
- Further research is needed to evaluate their efficacy as an educational tool

References

- Bolton-Maggs PHB and Pasi KJ (2003). Hemophilias A and B. The Lancet, 361(9371), 1801-1809.
- Hilliard P, Funk S, Zourikian N, Bergstrom BM, Bradley CS, McLimont M, Manco-Johnson M, Petriani P, Van Den Berg M and Feldman BM (2006). Hemophilia joint health score reliability study. Haemophilia, 12(5), 518-525.
- Srivastava A, Brewer AK, Mauser-Bunschoten EP, Key NS, Kitchen S, Linas A, Ludlam CA, Mahlangu JN, Mulder K, Poon MC and Street A; Treatment Guidelines Working Group on Behalf of the World Federation of Hemophilia (2013). Guidelines for the management of hemophilia. Haemophilia, 19(1), e1-e47.