Fitting Rigid Knee Brace

SCOPE (Area): Emergency Department

SCOPE (Staff): Physiotherapists, medical, nursing and EDA staff

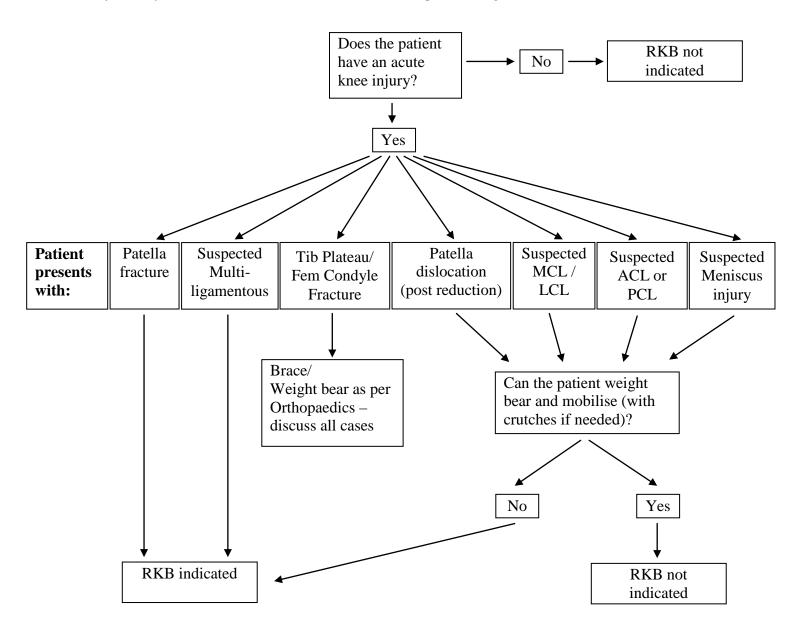
PURPOSE and SCOPE

A Rigid Knee Brace is an orthotic device used to immobilise the knee in extension and provide mediolateral knee joint support.

This CPG aims to educate ED staff about the appropriate prescription and fitting of a Rigid Knee Brace (RKB).

INDICATIONS

**Note: this guideline is designed only for fitting of brace, not to guide diagnosis of knee injuries. If there are clinical concerns contact orthopaedics registrar on call on #6116.



POINTS TO CONSIDER

- If knee swelling or effusion is present, apply Tubigrip to the knee before fitting the brace. This will reduce the risk of pressure areas/cuts from the straps
- Sizing:
 - o Max Calf Circumference 50cm / Max Thigh Circumference 64 cm
 - o The brace should extend from mid-thigh to mid-calf
 - o Select the brace size (length) according to the patient's leg length

Small: 16 inchMedium: 20 inchLarge: 24 inch

o **For bariatric patients**: a bariatric 20 inch brace is available (Max Calf Circumference 70cm, Max Thigh Circumference 90 cm)

PROCEDURE

- Refer to flow chart (above) to determine when a Rigid Knee Brace is required **Note: brace may be used for pain management or to facilitate discharge home
- Refer to the **Universal knee immobiliser instruction manual** for fitting instructions Ensure patient has a copy
- Patient education:
 - o Apply the brace with the knee in full extension
 - o The brace must be symmetrical around the knee cap and the straps securely tightened to prevent movement of the brace while walking
 - o The brace may be removed for showering hygiene (unless otherwise specified)
 - o Monitor skin regularly for irritation and pressure areas (especially if altered or impaired sensation)
- Send patient with paperwork to registration clerk to complete payment
 - o Payment is preferred at the time of fitting for both ED and Short Stay Unit
 - Patients who are unable to pay at the time of fitting can still receive equipment. Inform patient that they will receive an invoice from RMH.

RELATED DOCUMENTS

Internal

Appliance Purchase Agreement Form

External

Universal Post-Op Knee Immobiliser Instruction Manual

POST-OP KNEE IMMOBILISER



FITTING INSTRUCTIONS



STEP 1

- Select apprioriate size using chart below.
- For universal immobiliser only pull all panels apart before fitting.
- iii) Check and contour the lateral stays as required.
- iv) The aluminium stays can be bent by hand.
- Repeat the above instructions for the medial stays.



STEP 2

- Posterior stays have been pre-contoured and do not require further contouring for most patients.
- ii) For universal knee immobilisers; re-attach side panels so that the device fits the patient's leg circumference.



STEP 3

- Fasten straps ensuring the patella opening is located over the patella.
- Ensure that all straps are firm to prevent any slippage of the immobiliser.



STEP 4

 Once the brace is applied, please ensure the leg is correctly supported to prevent the device from digging into the thigh or calf.

eg. Authority: Director & NUM Emergency Medicine **Review Responsibility:** Emergency Department

Date Effective: 3.6.2015
Date Revised: 24.06.2019
Date for Review: 11.2021

Original Author: Sam Page 2014

Updated by: Emily Cross and James Leggett 2019