

Don't SLLIPP up on your Back slabs;

Improving plaster application & knowledge of complications in first line treatment of casting limbs in ED CGH

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1. Background

Historically the practice of plastering limbs has often been seen as a task that just 'anyone can do', without fully appreciating the consequences of a poor technique.

The British Orthopaedic Association runs an intense training programme for Orthopaedic Practitioners resulting in the British Casting Certificate, a years experience in a plaster room is required before the course can be attended.

At GHNHSFT Orthopaedic Practitioners are clinic based unlike some areas that are also ED based.

Recurrent plaster sores, incorrect application of casts and poor positioning of limbs have highlighted the need for change in our ED.

2. Aim

That 80% of Emergency Department Staff attending a refresher of competencies, techniques & complications of casting at Cheltenham General Hospital will have a heightened awareness of a well fitted, functional, comfortable and well-structured cast and potential complications that can occur.

3. Driver Diagram

Aim	Primary Drivers	Secondary Drivers	Change Ideas
80% of ED Staff attending a refresher course at CGH will have a better awareness of a well fitted, functional, comfortable and well-structured cast & potential complications that can occur	Plaster sores as a result of poor technique during cast application	Lack of educational refreshers of key points when applying a plaster cast/splint, due to time constraints	Introduction of SLLIPP (acronym) poster A model made of plaster of paris named SLLIPP, is in situ in ED to raise awareness
	Lack of knowledge regarding the skill set required to plaster leading to a have a go approach	Lack of communication between ED and plaster room	Identify at least 1 link nurses to communicate & liaise with plaster room (Link nurse Poster in place) SLLIPP booklet devised to give to new starters in ED Useful for Revalidation (Draft available)
	Lack of knowledge of the complications that occur during treatment in a cast	Lack of feedback to the ED department, when complications are dealt with by the plaster room	Extra training for link nurses with Hand therapy & plaster room Review & update staff competencies

01. SKIN
Observe the skin condition and take into consideration any predisposing factors that may affect your patient.
Always document your findings.

02. LAYERS
Think about how many layers you should use when applying a slab for maximum support. Please use reinforcing strips at ankles and elbows.

03. LENGTH
If a cast is too long it can impede finger/joint movement, leading to, for example - **Chronic Regional Pain Syndrome.**

04. INDENTATIONS
Finger indentations on the outside of a cast will cause ridges on the inside, leaving your patient vulnerable to **pressure sores.**

05. PLASTER SORES
Applying a cast incorrectly may result in a plaster sore further down the line.

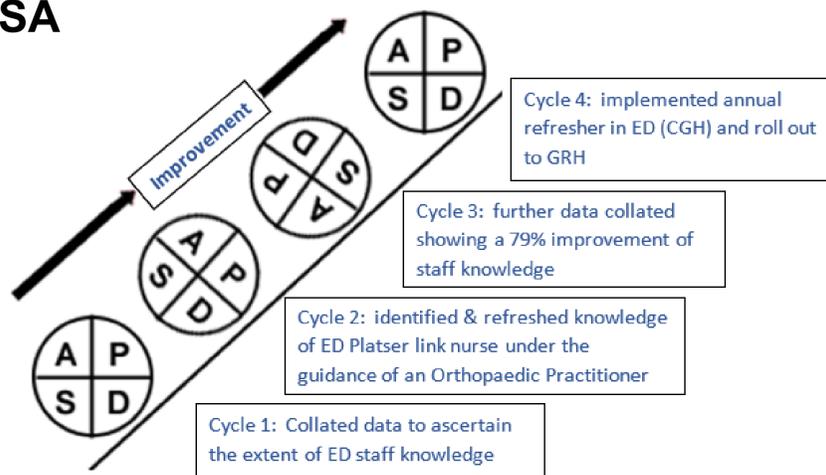
06. POSITION
Have you placed the patient's limb in the **correct position?**

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4. Method

- An ED link nurse was identified for all plaster room & ED staff to liaise with.
- A refresher session was given to the link nurse in plaster techniques by an Orthopaedic Practitioner.
- A selection of staff in ED were given a questionnaire to gauge an understanding of six key points in plaster application. Their understanding of these key points were then recorded
- A teaching aid was identified by myself & the link nurse in the form of a leaflet explaining the acronym of SLLIPP in more detail. This was used to give structure to the teaching session.
- The ED link nurse performed a refresher of competencies, techniques & complications of casting to ED staff.
- After their refresher session, we re-audited the ED staff in the form of another questionnaire.

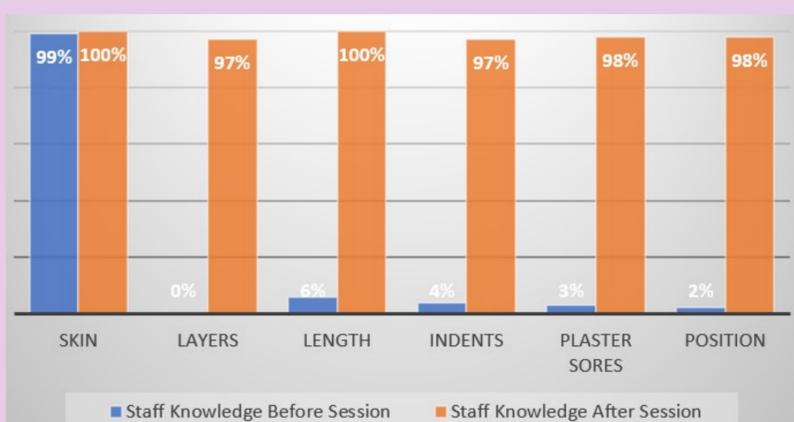
5. PDSA



6. Results & Measurements

The results and measurements were compared before and after the refresher session there was an average of 98.333% improvement.

When asked "are you aware of the consequences of a poorly applied cast"? all the staff questioned were aware -100%



7. Conclusion

New staff in ED receive a comprehensive plaster training day by their trainers, a competency is completed but not updated.

By improving communication and working together we have commenced measures to ensure that refreshers are in place with a view to these being carried out yearly & documented.

The target of 80% was almost reached with a result of 78%

8. Next Steps

- We intend to work on the production and Introduction of a work book ensuring yearly updates can be recorded and evidence for revalidation purposes.
- Each staff member in ED will receive a card with the SLLIPP acronym printed on it.
- Plaster removal competency – to ensure safe removal/split of a cast with a plaster saw.
- Roll out SLLIPP in GRH ED