

The Spica Stroller: A novel device to facilitate post hip spica care in young children



Child sad in
spica

Child Happy
in spica



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Materials and Methods:

Design: A stroller was deigned which would

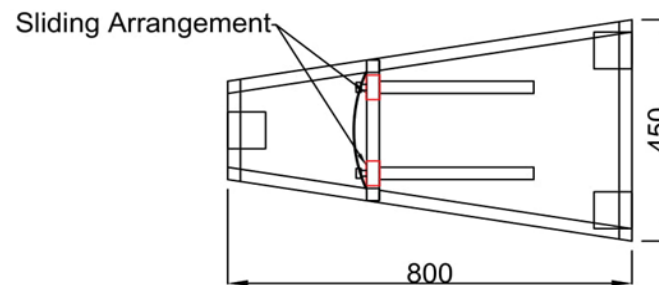
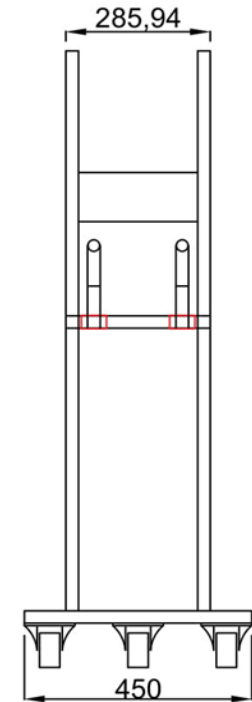
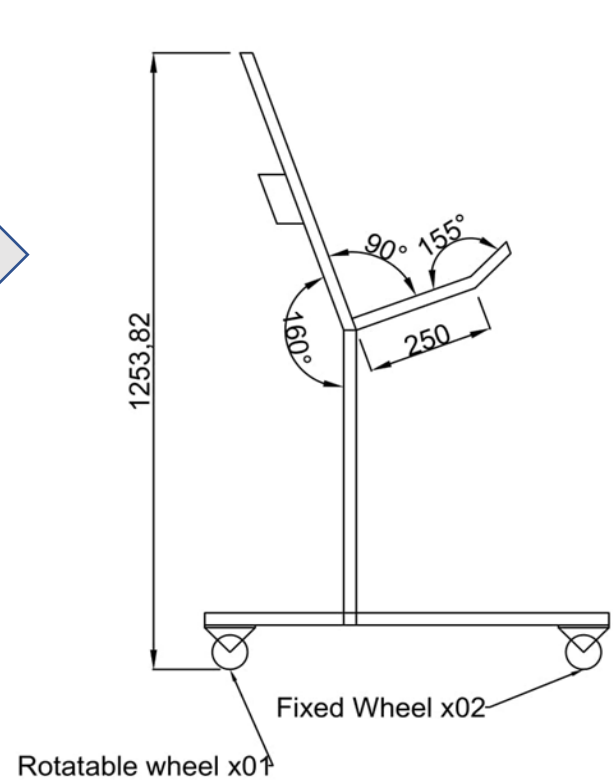
1. Allow the child to sit upright
2. Allow the parts of the cast proper and safe space.
3. Is sturdy and easy to move

Protocol: After 3rd post-operative day for DDH or femur fracture spica application, the children were allowed to be mobilized in spica strollers.

We looked for Complications

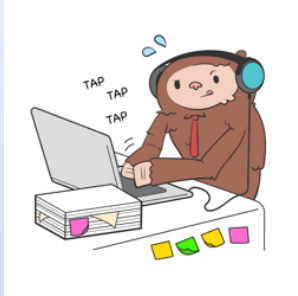
1. Spica breakage
2. Skin irritation-excoriation development
3. Loss of reduction etc.

Also, on removal of spica we asked the parents on their satisfaction with the device- Yes/ No



1. 25x25x1.6mm Thick hollow section pipe to be used unless specified
2. rear wheel (single Piece) should be rotatable, and front (two pieces) should be fixed for better stability
3. Sliding arrangement is provided to carter different cast sizes.
4. Handle is not shown in drawing, it can be added as per requirements.

Results



We used the spica stroller in 8 patients post DDH spica application and 3 patients with femur fracture managed with spica.



None of them had any stroller related complications.



Also, it had a 91 % (10 out of 11) parent satisfaction ratio

Conclusion

- Spica stroller is an innovative and easy-to-make device which would enhance the post spica rehabilitation.
- It can aid alleviating the fear of parents for their child's post spica care.
- It provides an affordable (**Rs. 2500**) and yet safe alternative to costly Western devices (**\$1000**).
- Such a device can be kept at Paediatric orthopaedic institutions to be used by successive Hip-Spica patients

