



NEONATAL SERVICES DIVISION

Approved by Quality & Patient Care Committee
July 2018

MEDVAC INFANT RESTRAINER FOR MRI

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INTRODUCTION

Neonates requiring MRI scanning need to remain motionless during the procedure. The MedVac infant restrainer is an air-tight, multi-chambered system that provides a vacuum splint to the infant. It stabilises the infant to be motionless during MRI.

1. AIM

To apply the MedVac restrainer safely to the infant for an MRI

2. PATIENT

Newborns

3. STAFF

Medical and nursing staff

4. EQUIPMENT

MedVac infant restrainer Bonnet Warm bunny rug or soft linen wrap

5. CLINICAL PRACTICE

- 1. Explain the procedure to parents.
- 2. Ensure the infant has identification labels.
- 3. Ensure that the infant has been fed 30-40 minutes before scan time (if scan appointment is available).
- 4. Ensure that all items containing metal are removed from the infant including clothes with metal buttons.
- 5. Ensure that the infant has a dry and clean nappy.
- 6. Put a hat/bonnet on the infant.
- 7. Put the infant in the warm bunny rug or soft linen wrap.
- 8. Wrap the infant snugly with a limb exposed for the pulse oximetry probe.
- 9. Rotate valve on MedVac Bag CLOCKWISE until tight. (Picture 1)







(B) Fitting of pump

Detailed information and instructions.

Picture 1 Picture 2 Picture 3



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- 10. Place the infant on open MedVac bag and wrap it around the infant's torso and buckle up the strap.
- 11. Wrap velcro strap across the forehead and above the eyebrows. (Picture 2) If required, place the second velcro across chin.
- 12. The manual pump has two fittings (A) for inflation and (B) for evacuation of air. Attach hose to (B) fitting of the pump (Picture 3) to deflate the air from the bag.







Picture 4

Picture 5

Picture 6

- 13. Attach the end of hose to valve on MedVac bag. (Picture 4)
- 14. "Cup" the area of the bag wrapped around the head (Picture 5) while evacuating the air from the bag by using the attached pump. (Picture 6)
- 15. Pull the lever to evacuate air (2 to 2½ pumps).
- 16. When the air has been evacuated from the MedVac bag, remove the hose from the valve. Plug the valve.
- 17. Transport the infant to the MRI Room and place infant in the Coil. (Picture 7)

For Infant <1,500g:

- Position the infant on the large section of the bag.
- Buckle up the strap to secure the infant's legs only. Ensure the leg with the saturation probe is exposed.
- Fold the top part of the bag onto the infant's forehead and hold the sides of the bag in position around the temporal region of the infant's head.
- Evacuate the air from the bag (Action 11 to 15).







Picture 7

Picture 8

Picture 9

- 18. After the scan is complete, remove the infant from the coil and unbuckle the straps. (Picture 8)
- 19. Rotate the valve on MedVac Bag Counter-Clockwise until the bag re-fills with air. (Picture 9).



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- 20. Remove hose and plug.
- 21. Remove infant from bag.
- 22. Transport the infant back to the NICU.
- 23. Clean the bag after every use using water and neutral detergent.
- 24. Put the bag, hose and pump back into the plastic container and return to the store room.

6. DOCUMENTATION

- eMR nursing notes
- Daily Care Plan
- Neonatal Observation Chart
- NICUS database

7. RISK RATING

Low

8. NATIONAL STANDARD

Standard 1 Governance for Safety and Quality in Health Service Organisation

9. ABBREVIATIONS AND DEFINITIONS OF TERMS

NCC	Newborn Care Centre	MRI	Magnetic Resonance Imaging
LOP	Local Operations Procedure		

10. REFERENCES

Contour Fabricators, Inc., cfi Medical Medical Solutions, MedVac instructional presentation, © 2007-2011 CFI Medical Solutions: http://www.cfimedical.com/product-details.asp?id=4555

11. AUTHOR

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