



**ELIMINATE THE NEED FOR SEDATION
IN INFANT MRI & CT
with
MedVac Vacuum Immobilisation Splints**



The MedVac Infant Immobiliser eliminates the need for sedation in Pediatric MRI Scans. See “Guideline for Transporting, Stabilizing and Performing Brain MRI in Neonates Without Sedation” written by Neonatologist – Dr Amit Mathur – Washington University School of Medicine

MedVac’s air-tight, chambered vacuum splint comes filled with tiny, evenly spaced beads. Simply wrap the vacuum splint around the infant, secure the straps, hook the splint to a pump and evacuate the air. The bag will become rigid around the newborn without squeezing or applying pressure. When finished, simply release the valve to allow the vacuum splint to re-fill with air, then undo the straps.



Note:

This presentation is a suggested guideline based on the procedures used at the Washington University School of Medicine.

Actual procedures will vary based on the physical condition of the patient involved.

Continue to follow required safety precautions in accordance with the current medical guidelines.



Step 1: Prepare the Infant



Suggestion: Adjust the Feed Schedule on the morning of the scan to ensure that the infant has been fed 30-45 minutes before scan time.

Undress the Infant down to diaper and remove any metallic monitoring leads and any dome fastener containing clothing items.



Step 2: Wrap the Infant



Wrap the infant snugly in 1-2 infant sheets in an old fashioned firm swaddle, leaving only the head and one foot (the one with the transport pulse oximetry probe) exposed



Step 3: Close the Valve

**Rotate the valve on the MedVac Bag
Clockwise until tight.**



Step 4: Place Infant on Bag

**Place the infant on the opened MedVac
Bag**





Step 5: Wrap the infant

Wrap the bag firmly around the infant's torso, making sure to have enough of the material above the head to wrap around the head as well



Step 6: Wrap the Forehead

Wrap Velcro Head Strap around the infant's forehead, and if required around the infant's chin.





Step 7: Prepare The Pump

The Manual Pump has 2 fittings, (A) for Inflation and (B) for Evacuation of air.

Attach one end the hose into fitting (B) of the pump in order to EVACUATE air from the bag.

For detailed information, see instructions printed on manual pump



Step 8: Attach The Pump

Attach the end of the hose to the valve on the MedVac Bag





Step 9: Evacuate The Air

While “cupping” the area of the bag wrapped around the head, evacuate the air using the attached pump.

Note: You cannot “Over-Pump” the bag. Air is being removed from the bag not forced in, so there is no danger of “squeezing” the infant.



Step 10: Remove Hose

Once the air has been evacuated from the MedVac bag, the infant is now contained in a rigid cradle. Remove the hose from the valve





Step 11: Place Infant in Coil

Transport the Infant to the MRI Room, and place Infant in Coil.

Note: The Infant can be carried by the Mother or Father into the MRI room in order to provide comfort to the infant and the parent.



Step 12: Run the Scan

Conduct MRI Scan. If infant awakens and cries without settling down, he/she may need to come out and be gently rocked. This can be successfully accomplished with the infant still in the vacuum bag.





Step 13: Unbuckle the Infant

After the Scan is complete, remove the infant from the coil and unbuckle the straps



Step 14: Open the Valve

Rotate the valve on the MedVac Bag Counter-Clockwise until the bag re-fills with air.



Step 15: Remove Infant



Remove the Infant from Bag and return him/her to ICU.

Be sure to clean the bag after every use using water and a detergent. An extreme mechanical cleaning which might impair the surface material must be avoided. Disinfect exclusively using alcohol-based (ethanol/propanol) disinfectants. When other substance classes are used this might lead to irreversible damage of the surface and material. Do not use solvents.

**Neonatal
VMR433X01**



Specification	VMR433X01
Colour:	blue
Material:	TPU
Length, cm:	67
Width, cm:	35-55
Weight, kg:	0,7
Thickness, cm:	2-3

**Manual Foot Pump
Plastic & Aluminium
Non-magnetic
FP01**



**Manual Hand Pump
Aluminium
Non-magnetic
HP03**



Vacuum valve





The MedVac Infant Immobilizer is currently being used at the following facilities:

FACILITY

UNIVERSITY OF CALIFORNIA	SAN DIEGO	CA
WASHINGTON UNIVERSITY	ST LOUIS	MO
STANFORDUNIVERSITY	PALO ALTO	CA
LOMA LINDA HOSPITAL	LOMA LINDA	CA
WOMEN & INFANTS UNIVERSITY	PROVIDENCE	RI
YALE UNIVERSITY	NEW HAVEN	CT
DUKE UNIVERSITY	DURHAM	NC
PARKLAND HOSPITAL	DALLAS	TX
PRIMARY CHILDREN'S HOSPITAL	SALT LAKE CITY	UT
SICK KIDS HOSPITAL	TORONTO	ONTARIO; CANADA
RILEY CHILDREN'S HOSPITAL (IUPUI)	INDIANAPOLIS	IN
UNIVERSITY OF TEXAS HEALTH SCIENCE CTR	HOUSTON	TX
UNIVERSITY OF ALABAMA	BIRMINGHAM	AL
CASE WESTERN RESERVE UNIVERSITY	CLEVELAND	OH
HOLSTON VALLEY MEDICAL CENTER	KINGSPORT	TN
ROCKFORD MEMORIAL HOSPITAL	ROCKFORD	IL
CHILDREN'S HOSPITAL OF IOWA	IOWA CITY	IA
SOKORA UNIVERSITY MEDICAL CENTER	BEER SHEVA	ISRAEL
TUFTS UNIVERSITY – NEW ENGLAND MED CTR	BOSTON	MA
FOOTHILLS MEDICAL CENTER	CALGARY	ALBERTA; CANADA
ST: JOHN'S MERCY HEALTHCARE	EARTH CITY	MO
CARLE FOUNDATION HOSPITAL	URBANA	IL
UNIVERSITY OF UTAH	SALT LAKE CITY	UT
NORTHWESTERN MEMORIAL HOSPITAL	CHICAGO	IL
PRESBYTERIAN HOSPITAL	ALBUQUERQUE	NM
WAYNE SATE UNIVERSITY	DETROIT	MI
ICHILOV HOSPITAL	TEL-AVIV	ISRAEL
CHILDREN'S NATIONAL MEDICAL CENTER	WASHINGTON	DC
WINDSOR REGIONAL HOSPITAL	WINDSOR	ONTARIO; CANADA
SPARROW HOSPITAL – MID MICHIGAN MRI	LANSING	MI
LDS HOSPITAL	SALT LAKE CITY	UT
CHIDREN'S HOSPITAL OF PHILADELPHIA	PHILADELPHIA	PA
UNIVERSITY OF VIRGINIA	CHARLOTTESVILE	VA
ST CLOUD HOSPITAL	ST CLOUD	MN
UNIVERSITY OF MEXICO	ALBUQUERQUE	NM
MARY HITCHCOCK MEMORIAL HOSPITAL	LEBANON	NH
CHILDREN'S HOSPITAL	BOSTON	MA
FREDERICK MEMORIAL HOSPITAL	FREDERICK	MD
ST: VINCENT HOSPITAL	PORTLAND	OR
COOPER HEALTH SYSTEM	CHERRY HILL	NJ
ST: FRANCIS MEDICAL CENTER	CAPE GIRARDEU	MO
NORTHSIDE HOSPITAL	ATLANTA	GA
ST:VINCENT WOMEN'S HOSPITAL	INDIANAPOLIS	IN
PETER LOUGHEED CENTER	CALGARY	ALBERTA; CANADA
UNIVERSITY OF WASHINGTON	SEATTLE	WA
METHODIST HOSPITAL	SAN ANTONIO	TX
DAYTON CHILDREN'S HOSPITAL	DAYTON	OH
EMORY UNIVERSITY	ATLANTA	GA
CARLE CLINIC	URBANA	IL
MONTEFIORE MEDICAL CENTER	BRONX	NY
CHILDREN'S HOSPITAL OF ORANGE	ORANGE	CA
OSF ST FRANCIS MEDICAL CENTER	PEORIA	IL
SHANDS TEACHING HOSPITAL	GAINSVILLE	FL
NORTH GREELEY MEDICAL CENTER	GREELEY	CO
FLETCHER ALLEN HEALTH CARE	BURLINGTON	VT
QUEEN OF THE VALLEY HOSPITAL	COVINA	CA
ROYAL CHILDREN'S HOSPITAL	PARKVILLE	AUSTRALIA
LEESBURGREGIONAL MEDICAL CENTER	LEESBURG	FL
MINNEAPOLIS CHIDREN'S HOSPITAL	ST: PAUL	MN
UNIVERSITETSSYKEHUSET NORD-NORGE HF	TROMSOE	NORWAY
BETH ISRAEL DEACONESS MEDICAL CENTER	BOSTON	MA
USA CHIDREN'S AND WOMEN'S HOSPITAL	MOBILE	AL
GEORGETOWN UNIVERSITY HOSPITAL	WASHINGTON	DC
ROCKVIEW GENERAL HOSPITAL	CALGARY	ALBERTA; CANADA
OVERLAND PARK REGIONAL MEDICAL CENTER	OVERLAND PARK	KS

KOHLBRAT & BUNZ

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