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*Leaders in Neuro Care*

# NEURO BATTLE AGAINST DEEP VEIN THROMBOSIS

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**Presented By: Prasath Ramalingam  
(PT)**

**Incharge Physiotherapist,**



## INTRODUCTION

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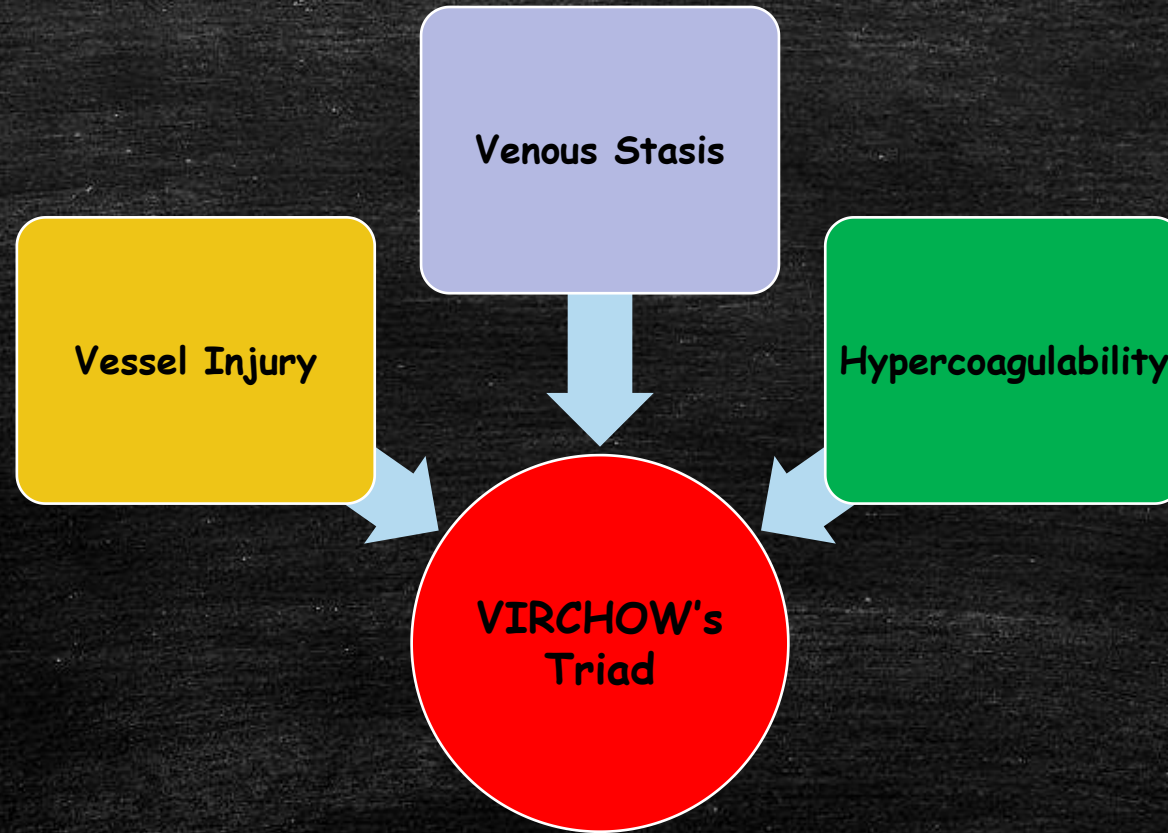
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Deep vein thrombosis (DVT) is the formation of clots in the deep venous system of the body and primarily affects the large veins in the lower leg, thighs, and can also occur in deep veins of the arms and pelvis. In this poster we speak about literature review and preventive measures as well as our hospital management protocol in preventing DVT.



# PATHOPHYSIOLOGY





# DVT IN NEUROSCIENCES



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The incidence of DVT in neurosurgical cases vary significantly from 7.9% to 29%.

In Neurosurgery, the highest risk for DVT is in patients with brain tumors (28-43%), followed by patients undergoing craniotomy (25%), and those with head injury (20%).

Among brain tumors, patients with cerebral metastasis and glioma have the highest incidence of DVT especially in supratentorial and suprasellar locations.





## Our study data and results

- ❖ Total no. cases till DEC 2021 after exclusion is 5430. Medical- 2000, surgical 3430.
- ❖ Among surgical, vascular cases 320, cranial tumor 1444, spinal cases 1285, shunted- 146, others 168. Well's score low risk 780, high risk 4650.
- ❖ D-dimer screening done in all medical cases on day of admission for medical cases and on first POD in surgical cases
- ❖ LMWH given in 5190 (given within 48 hrs of surgical cases exception in ICH), Pneumatic cuff pump 240 exclusive in ICH and 4110 in high risk and economical patients. Compression stocking in low risk and non economical patients 1320
- ❖ All patients mobilized on first POD in surgical patients and medical patients exception being hypotension, unstable spinal fractures, ventilator patients.
- ❖ Till date only 15 cases has been documented with DVT in our institute.





## NEURO ONE DVT PROTOCOL CHART

WELL'S SCORE	HIGH RISK/LOW RISK
HISTORY TAKING	SMOKING/ALCOHOL/ORAL CONTRACEPTIVE PILLS
CENTRAL LINE	YES/NO
D-DIMER SCREENING	<2MG/L, >2MG/L/
USG DOPPLER SCREENING ON DAY 1 ON THE EXIT OF ICU WEEKLY SCREENING ON EVERY SEVENTH DAY	Yes /No
CLINICAL EXAMINATION DURING THE STAY DAILY	SWELLING IN THE LIMB, WARMTH, TENDERNESS, HOMAN"SIGN







## Cont.....

DVT PROPHYLAXIS:	COMPRESSION STOCKING	Y/N
	PNEUMATIC CUFF PUMP	Y/N
	HEPARIN	Y/N
DVT DIET	YES/NO	
NO.OF DAYS STAY IN ICU	<3DAYS ,3-7DAYS, >7DAYS	
EARLY MOBILIZATION OF PATIENT WITHIN THREE DAYS	YES/NO	
IF DVT, THEN MT	MEDICAL/SURGICAL	
AT TIME OF D/S, DVT	YES/NO	







# Neuro One DVT Monitoring Chart



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 <b>Neuro One</b> <small>Leaders in Neuro Care</small>		<b>DVT MONITORING CHART</b>																																			
Patient Name : _____		Age/Sex : _____																																			
UHID : _____		IP NO : _____																																			
Dept : _____		Consultant Name: _____																																			
Date : _____		Diagnosis : _____																																			
<b>AGE SPECIFIC GROUP</b> <table border="1"> <thead> <tr> <th>Years</th> <th>Score</th> </tr> </thead> <tbody> <tr><td>10-30</td><td>0</td></tr> <tr><td>31-40</td><td>1</td></tr> <tr><td>41-50</td><td>2</td></tr> <tr><td>51-60</td><td>3</td></tr> <tr><td>61+</td><td>4</td></tr> </tbody> </table>			Years	Score	10-30	0	31-40	1	41-50	2	51-60	3	61+	4	<b>BUILD / BODY MASS INDEX (BMI) Wt(kg) / Ht(m)</b> <table border="1"> <thead> <tr> <th>Build</th> <th>BMI</th> <th>Score</th> </tr> </thead> <tbody> <tr><td>Underweight</td><td>16-18</td><td>0</td></tr> <tr><td>Average/ Desirable</td><td>20-25</td><td>1</td></tr> <tr><td>Overweight</td><td>26-30</td><td>2</td></tr> <tr><td>Obese</td><td>31-40</td><td>3</td></tr> <tr><td>Very obese (morbid)</td><td>41+</td><td>4</td></tr> </tbody> </table>			Build	BMI	Score	Underweight	16-18	0	Average/ Desirable	20-25	1	Overweight	26-30	2	Obese	31-40	3	Very obese (morbid)	41+	4		
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# CONCLUSIONS

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Hereby we conclude that in neuroscience cases DVT incidences are high as reported in literature and we formatted a DVT protocol chart and follow these steps strictly, hence DVT in our centre is less than one percentage. We place this topic in this forum, to create awareness of neuro battle against DVT.