



NEWSLETTER JUNE-JULY 2023

# MEDI UPDATES

We are thrilled to announce that we are celebrating  
7th anniversary!

It has been a remarkable journey of serving our community with top-notch healthcare services and saving countless lives. We couldn't have achieved this milestone without your continued trust and support.



NEUROSURGERY & NEUROLOGY  
CARDIOLOGY  
NEPHROLOGY & UROLOGY  
CRITICAL CARE & PULMONOLOGY  
LAP SURGERY & PLASTIC SURGERY  
MEDICINE & PAEDIATRICS (NEONATOLOGY)  
ORTHOPEDIC & JOINT REPLACEMENT  
ANESTHESIA & EMERGENCY MEDICINE  
RADIOLOGY & INTERVENTIONAL RADIOLOGY  
PATHOLOGY & DIAGNOSTICS  
GASTROENTEROLOGY  
ENT, PSYCHIATRY & ALLIED SPECIALITIES

# Not all angels have wings, some have stethoscopes

## CASE VIGNETTE NEUROLOGY

## BRUNS NYSTAGMUS



A 50 years old female presented with insidious onset, gradually progressive difficulty in walking with swaing on right side,Tremulousness of limbs,Giddiness and difficulty in speech.

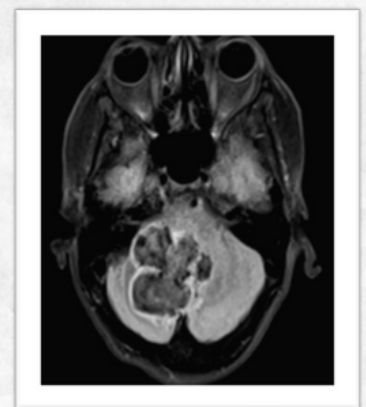
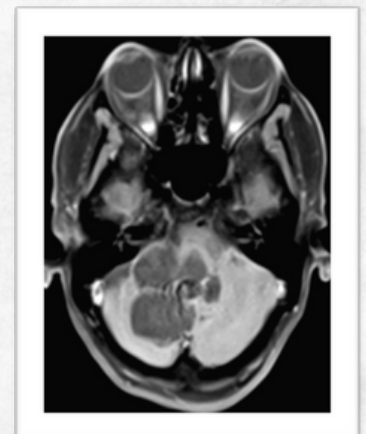
On examination she was conscious, cohorent and cooperative. Pupils were reactive to light, She had Gaze evoked Nystagmus with Right sided slow beating Nystagmus and left side fine fast beating Nystagmus, mild right sided facial weakness, mild hearing impairment on right, scanning speech ,Tone, Power and reflexes were normal, She had right sided FNF incordination, Ataxia with right sided tilt.

On Investigation ,MRI Brain showed right sided CP angle lesion with cerebellum and brainstem involvement. She has been advised surgery.

The overall prevalence of Bruns nystagmus is estimated to be 11% in CP angle lesions. With large tumours having maximal diameter greater than 3.5 cm, the prevalence was observed to be higher (92% of patients had nystagmus, 67% of whom had Bruns nystagmus). It comprises of a coarse, high-amplitude horizontal nystagmus with low oscillatory frequency as the patient looks towards the side of the lesion, but a fine, low-amplitude, high-frequency primary-position nystagmus that increases as the patient looks to the side opposite the lesion. Bruns nystagmus primarily is a form of jerk nystagmus, characterised by alternating slow and fast components. After focusing an object on the fovea, failure of gaze-holding results in the deviation of the eyes, contributing to the slow component of the nystagmus. Subsequently, corrective saccades, in an effort to refocus the object of interest back on the fovea, contribute to the fast component of the nystagmus. However, in Bruns nystagmus, the pathophysiology involves simultaneous impairment of different neural networks. Compression of the ipsilateral pons leads to a dysfunctional neural integrator (also the flocculus), which is unable to maintain eccentric gaze towards the side of the lesion, resulting in a high-amplitude, low-frequency, gaze paretic nystagmus. On the other hand, vestibular dysfunction leads to decreased tonic firing, which results in a slow-phase movement towards the side of the lesion with a compensatory fast-beating component in the contralateral direction.

Inference – A good clinical examination can help in localising site of lesion and reduce the cost of investigations.

Case Presented & Treated By : Dr Gaurav Shah (DM Neurology )



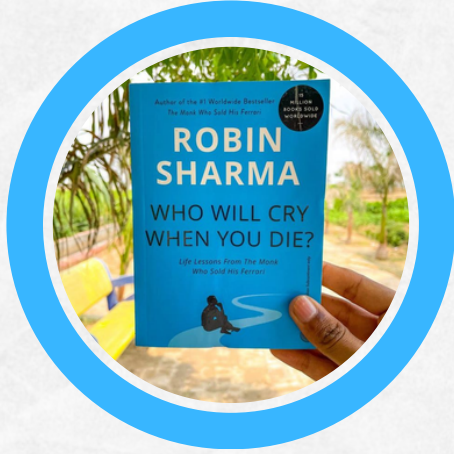
T2 HYPERINTENSE LESION OF APP 5\*5\*4CM LOBULATED LESION AT RIGHT CP ANGLE.



SCAN FOR VIDEO OF CLINICAL SIGN



“Success is not just about achieving material wealth, but about living a meaningful and purposeful life.”



## Book Troverts

# WHO WILL CRY WHEN YOU DIE BY ROBIN SHARMA

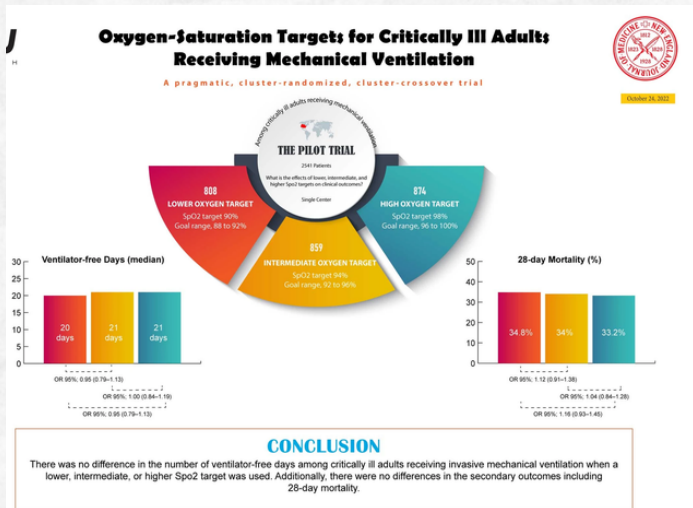
15 lessons from the book “Who Will Cry When You Die?” By Robin Sharma

1. The quality of your life is determined by the quality of your thoughts.
2. The time we spend in solitude allows us to connect with our deepest selves and find true joy.
3. Your outer world is a reflection of your inner world. Cultivate peace and happiness within to create a fulfilling life.
4. Surrender your need for control and embrace the flow of life. Trust that everything happens for a reason.
5. Take the time to express gratitude for the small blessings in life. Gratitude opens the doors to abundance.
6. Stop comparing yourself to others and start focusing on becoming the best version of yourself.
7. No matter how busy life gets, prioritize self-care. Your physical, mental, and emotional well-being should always come first.
8. Develop a daily routine that includes activities that nourish your mind, body, and soul.
9. Spend time in nature regularly, as it has a profound healing and rejuvenating effect on the soul.
10. Choose to surround yourself with positive, supportive people who inspire you to become better.
11. Don't wait for tomorrow to pursue your dreams. Start taking small steps towards your goals today.
12. Forgiveness is not just for the person you're forgiving, but for your own inner peace. Let go of grudges and move forward.
13. Success is not just about achieving material wealth, but about living a meaningful and purposeful life.
14. Embrace failure as a stepping stone to success. Learn from your mistakes and keep moving forward.
15. Live each day as if it were your last, for one day you will certainly be right.

# Research Paper Review

Management of acute cardiovascular complications in pregnancy

## THE PILOT TRIAL



What was the research question?

- Does the clinical outcome in terms of ventilator-free days differ among different oxygen-saturation targets in patients on mechanical ventilation?

How did they do it?

- A pragmatic, unblinded, cluster-randomized, cluster-crossover trial in the emergency department and medical intensive care unit at Vanderbilt University Medical Center in the US.
- 2541 adult patients who were receiving mechanical ventilation were randomized to receive a lower target for oxygen saturation (90%; goal range, 88 to 92%), an intermediate target (94%; goal range, 92 to 96%), or a higher target (98%; goal range, 96 to 100%).
- The primary outcome was ventilator-free days through day 28. The secondary outcome was death by day 28.

What did they find?

- There was no significant difference in the median number of ventilator-free days between the lower-target group, intermediate-target group, and higher-target group (20 vs. 21 vs. 21 days,  $p=0.81$ ).
- In-hospital death by day 28 was not significantly different among the three groups (34.8% in the low-target, 34% in the intermediate target, and 33.2% in the high-target group).
- There was no significant difference in the incidences of cardiac arrest, arrhythmia, myocardial infarction, stroke, and pneumothorax between the three groups.



Research Paper link for Review

[https://www.nejm.org/doi/full/10.1056/NEJMoa2208415?query=featured\\_home](https://www.nejm.org/doi/full/10.1056/NEJMoa2208415?query=featured_home)



# Best Practice Series

## Vasopressor Support in Septic Shock

### APPROACH TO VASOPRESSOR SUPPORT

#### I N S E P T I C S H O C K

Start early and titrate vasopressors to maintain mean arterial pressure above 65 mm Hg with adequate fluid resuscitation  
Use advanced hemodynamic monitoring and perform echocardiography with escalating doses of first line agents

01 ▶



#### NOREPINEPHRINE

Maximum dose is not defined but determined based on response (1-1.5 µg/kg/min).  
Consider hydrocortisone (and fludrocortisone) with escalating dosages of norepinephrine.  
If tachycardia >110/min, use vasopressin instead (phenylephrine use is discouraged).  
If bradycardia, may use dopamine.

01

02 ▶



#### VASOPRESSIN

Has a beta-adrenergic sparing effect and can be started at a fixed dose of 0.03 units/min once norepinephrine dose reaches 0.25-0.3 µg/kg/min.  
May use as a first line agent in cases of tachycardia.

02

03 ▶



#### EPINEPHRINE

In refractory septic shock epinephrine can be added and titrated at a dose of 0-1 mcg/kg/min (or higher).  
Note that high dose epinephrine may cause increase lactic acid!

03

04 ▶



#### ANGIOTENSIN II

Start at 20 ng/kg/min and titrate up to a maximum dose of 200 ng/kg/min.  
Evidence is weak but evolving.

04



CRITICAL CARE TEAM OF DIVINE LIFE HOSPITAL

DR NAAZ HUMDULAY  
DR SANDEEP KAPADIA  
DR MAULIK PATEL  
DR ADITYA PANDYA  
DR PRAGYA GUPTA

# Case Vignette

## Intensive Care Medicine

### Expect the Unexpected

It's my pleasure to share a rare and atypical case of a patient 25 year old male presented with history of ingestion of neem oil compound (azadirachtin) in unknown amount.

Patient was hypoxic, bradycardia n was intubated..ABG being normal and saturation still decreased , possibility of acquired methhemoglobinemia likely causing histotoxic hypoxia due to azadirachtin compound.

Patient treated with iv methylene blue n vit c.

Pt extubated next day.No complications..n pt being discharged in stable condition in 3 days

### METHYLENE BLUE : MECHANISM OF ACTION

- two opposite actions on Hb

(1) low concentrations: methylene blue -> NADPH-dependent reduction to leucomethylene blue (due to action of methaemoglobin reductase) -> reduces methaemoglobin -> Hb

(2) high concentrations: methylene blue -> converts ferrous iron of reduced Hb to ferric ion -> forms methaemoglobin

- inhibits guanylate cyclase (which is stimulated by NO and other mediators), thus decreasing C-GMP and vascular smooth muscle relaxation
- MAO inhibition

### DOSE

#### Methaemoglobinaemia

1-2mg/kg IV over 5 minutes followed by saline flush; repeat at 30-60 min if MetHb levels not falling

repeat dose every 6-8h when MetHb continues for days, e.g. dapsone toxicity

#### Vasoplegia

1.5-2 mg/kg IV over 30-60min



Dr Naaz Hamdulay is Senior Physician & Intensivist at Divine Life Hospital, Adipur with Vast experience in treating Critical Patients. She has created Reputation for herself with her work in treating critical patients.

#### Contact :

Divine Life Hospital, Post Office Road, Adipur  
admin@divinelifeadipur.com

[www.divinelifehospital.com](http://www.divinelifehospital.com)



# Drug Updates

## Contribution of inflammation to cardiovascular risk in patients receiving statin therapy (April 2023)

In patients with an indication for statin therapy, lipid lowering therapy has an anti-inflammatory effect but may not completely reduce inflammation, which may contribute to atherosclerotic cardiovascular disease. In an analysis of over 31,000 patients from three clinical trials of statin therapy, baseline levels of high-sensitivity C-reactive protein (CRP), a biomarker of residual inflammatory risk, were associated with incident major adverse cardiovascular events and cardiovascular mortality. By contrast, baseline levels of low-density lipoprotein cholesterol (LDL-C), a biomarker of residual cholesterol risk, were not associated with major adverse cardiovascular events but were associated with cardiovascular mortality. These findings suggest that among patients receiving statin therapy, residual inflammation may be a stronger predictor for cardiovascular risk than LDL-C.



## Crimean Congo Hemorrhagic Fever

Crimean-Congo hemorrhagic fever (CCHF) is a zoonotic disease transmitted by ticks and characterized by fever and hemorrhage. CCHF is common between May and September; ticks survive most readily in relatively warm, dry habitats. The incubation period following tick bite is typically one to three days; the incubation period following contact with blood and body fluids is typically three to seven days.

Clinical manifestations of CCHF include sudden onset of fever, headache, malaise, myalgia, sore throat, dizziness, conjunctivitis, photophobia, abdominal pain, nausea, and vomiting. In severe cases, hemorrhagic manifestations (petechiae, ecchymoses, epistaxis, and gum bleeding) are observed. Laboratory findings include thrombocytopenia, leukopenia, hyperbilirubinemia with elevated transaminases, and prolongation of prothrombin time and partial thromboplastin time.

The diagnosis of CCHF should be suspected in patients presenting with fever and bleeding who have relevant geographic and epidemiologic risk factors. Diagnostic tools include detection of CCHFV RNA by reverse-transcriptase polymerase chain reaction (RT-PCR) and serology. If available, RT-PCR is preferred. Specific immunoglobulin (Ig)M and IgG antibodies are detectable five days from the onset of symptoms.

Management of CCHF consists of supportive care; in severe cases, blood product replacement is warranted. Careful attention should be paid to fluid balance and electrolytes. Mechanical ventilation, hemodialysis, vasopressor, and inotropic agents may be needed. Acetaminophen may be used for fever and pain management; ibuprofen and aspirin should be avoided as these agents can adversely affect normal clotting. Prevention of CCHF consists of avoiding tick exposure and avoiding contact with animal bodily fluids.

Pls Join our LinkedIn Group : <https://www.linkedin.com/groups/9233179>



Divine Life Hospital, Post Office Road, Adipur  
Divine Kutch Life Care, 7 Arrows, Bhuj  
Divine Hospital, Anjar  
Alliance Hospital, Mundra

[www.divinelifehospital.com](http://www.divinelifehospital.com)  
[www.mediaidhealthcarellp.com](http://www.mediaidhealthcarellp.com)

[admin@divinelifeadipur.com](mailto:admin@divinelifeadipur.com)

# CELEBRATING 7 YEARS OF EXCELLENCE

We are excited to announce that Divine Life hospital is celebrating its 7th anniversary of providing exceptional healthcare services to our community.

Since our inception, our mission has been to deliver the highest quality medical care and ensure the well-being of every patient who walks through our doors.

Over the past seven years, we have achieved significant milestones and made remarkable advancements in medical technology, allowing us to offer state-of-the-art treatments and procedures.

Our dedicated team of doctors, nurses, and staff members are committed to delivering personalized care tailored to each patient's unique needs.

We express our sincere Gratitude to all  
Doctors/wellwishers/Patients/Staff &  
Family for keeping faith and supporting us. We look forward to serving you with even greater dedication in the years ahead.

- Team Divine Life Hospital  
& Divine Family



**THANK YOU**

**Divine Life Hospital, Post office road, Adipur**