

ILS TIMES

SALT LAKE • DUMDUM • HOWRAH • AGARTALA



Case Report : Large area of skin & soft tissue loss, VAC application, wound healing

Author:
Dr. Santanu Sarkar,
 Consultant Surgeon,
 ILS Hospitals, Howrah

Co-Authors:
Dr. Arnab Kar
 Consultant Internal Medicine

Co-Authors:
Dr. Ruchi Roumya Das
 Critical Care Incharge
 ILS Hospitals, Howrah

Clinical History & Imaging Findings:

A 64-year-old gentleman was admitted to the ITU, ILS Hospitals Howrah with features of Septic Shock. Immediate resuscitation was done with a bolus of IV fluids, Inotrope support, and IV antibiotics. Patient was diabetic and hypertensive. Later on, blood culture reveals

gram-negative Septicaemia. A surgical referral was made due to large area of skin necrosis over the left thigh. After proper resuscitation and other necessary conservative measures, the patient recovered from Septic Shock and an acute kidney injury, but there was a large area of

skin and soft tissue loss over the left thigh. We have done repeated sharp debridement and vacuum-assisted closure of the wound (Figures 3, 5), and then the area filled with good and healthy granulation tissue (Figure 7).

Sequential Images



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

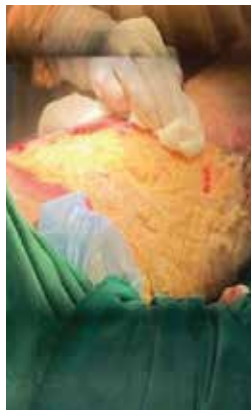


Figure 6



Figure 7



Figure 8

After that, split-thickness skin grafting was done successfully over the wound, and the patient recovered well and resumed his normal daily activities.

Discussion & Conclusion:

In a case of Septic Shock, peripheral blood is pulled to supply vital organs, i.e., the heart and brain, and for that reason, soft tissue necrosis may occur. The VAC system has several parts.

1. Initially, surgically sharp debridement is completed, and the wound is cleaned with normal saline.
2. The wound is then covered with a nano-silver-impregnated gauze piece.
3. A foam dressing is put directly over the wound.
4. An adhesive film covers the foam, and a drainage tube connects to a portable vacuum pump. Dressing is usually changed every 5th to 7th day.

A wound vacuum system may aid in wound healing by doing the following:

1. Draining excess fluid and fat from the wound
2. Reducing the swelling or inflammation.
3. Reducing bacteria in the wound.
4. Keeping the wound moist and warm.
5. Reducing the size of the wound.
6. Increasing blood flow to the wound.



Dr. Subhadip Laskar

MBBS, MD (General Medicine)
DNB (Gastroenterology)
ILS Hospitals, Howrah

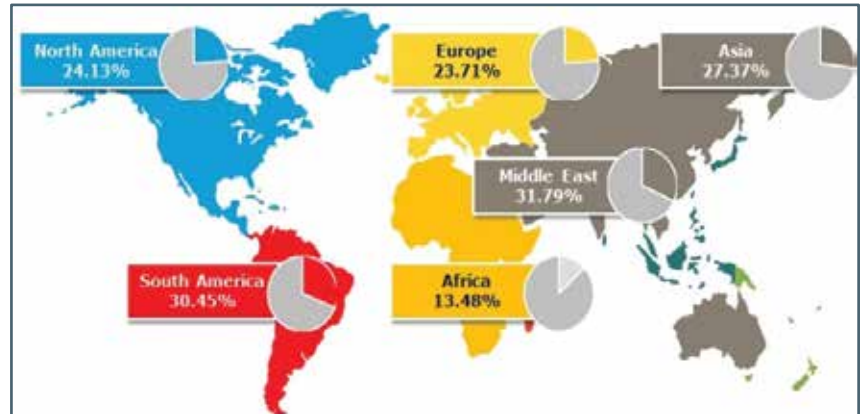
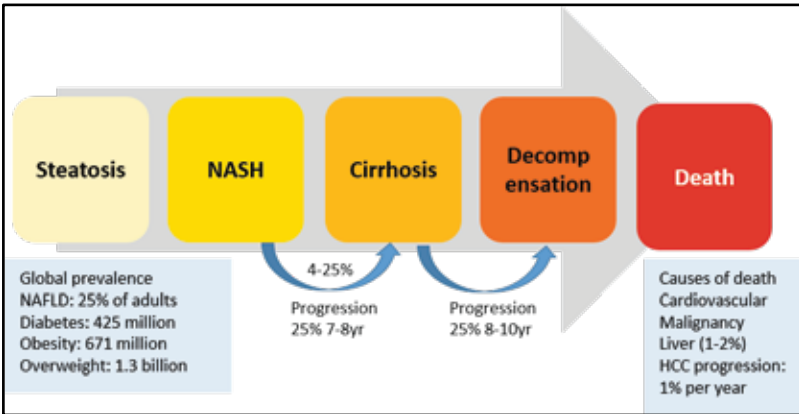
NAFLD / MAFLD - An epidemic in Indian Urban Population

The definition of NAFLD combines the presence of steatosis in more than 5% of hepatocytes and metabolic risk factors, especially obesity and T2DM, with the exclusion of excessive alcohol consumption, defined as >30 g per day for men and >20 g per day for women.

In 1986, the term nonalcoholic fatty liver disease (NAFLD) was proposed by Schaner and Thaler. Almost 10 years later, Leonardo

et al. hypothesized that NAFLD could be associated with cardiovascular disease (CVD), and soon after, the first NAFLD guidelines emerged.

In 2020, fatty liver was redefined from a negative (absence of excessive alcohol consumption and other known causes of liver disease) to a more positively stated Metabolic Associated Fatty Liver Disease (**MAFLD**).



The definition of MAFLD is based on the presence of hepatic steatosis and at least one other condition, such as overweight or obesity, T2DM, or metabolic abnormalities, with no additional exclusion criteria.

Metabolic abnormalities included in the definition cover at least two features from the following: increased waist circumference, arterial hypertension, hypertriglyceridemia, low high-density cholesterol (HDL-C), prediabetes, insulin resistance, and subclinical

inflammation.

This new definition underlines the importance of cardiometabolic risk factors contributing to liver disease, even among patients with other liver diseases and who drink alcohol.

Hepatic steatosis in adults

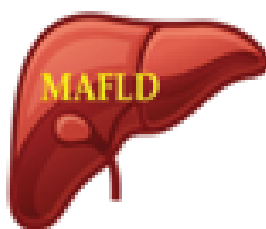
Overweight/obesity

Type 2 diabetes

Lean/ normal weight

+

Presence of at least two of the following metabolic risk abnormalities:



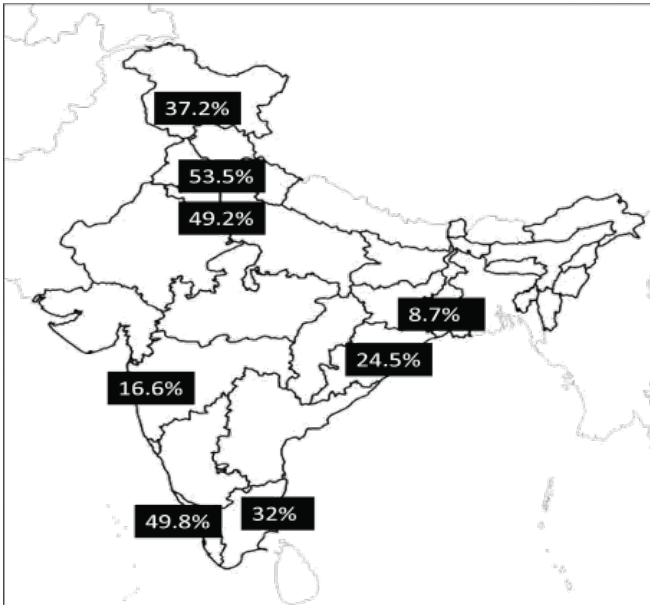
1. Waist circumference ≥ 102 cm in Caucasian men and ≥ 88 cm in women (or ≥ 90 in Asian men and ≥ 80 in Asian women)
2. Blood pressure $\geq 130/85$ mmHg or hypertension drug treatment
3. Plasma triglycerides ≥ 150 mg/dL (≥ 1.70 mmol/L) or its drug treatment
4. Plasma HDL-cholesterol < 40 mg/dL (< 1.0 mmol/L) for men and < 50 mg/dL (< 1.3 mmol/L) for women or its drug treatment
5. Prediabetes
6. Homeostasis model assessment of insulin resistance (HOMA-IR) score ≥ 2.5
7. Plasma high-sensitivity C-reactive protein level > 2 mg/L

Diagnostic criteria for MAFLD

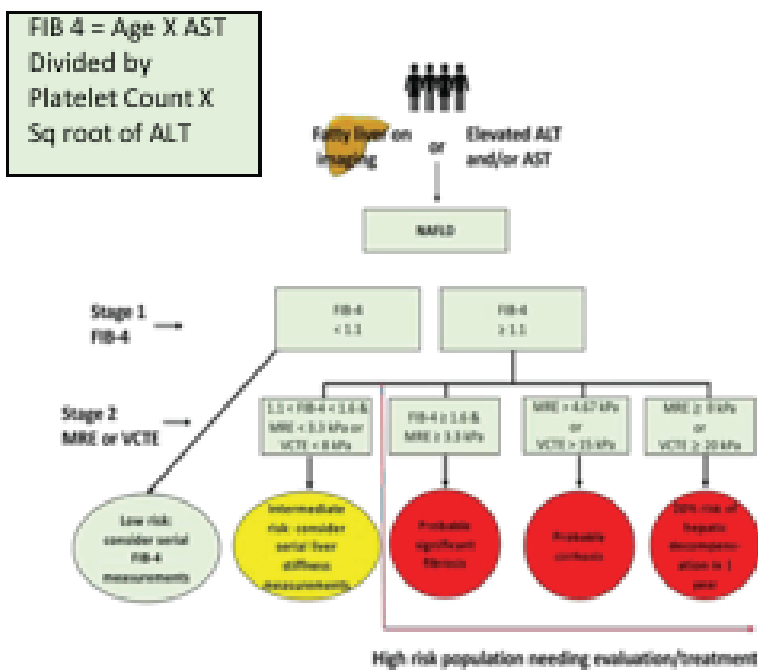
(Metabolic Dysfunction-Associated Fatty Liver Disease)

While the Prevalence of NAFLD in rural West Bengal is 8.7%, the prevalence of NAFLD is much higher in urban areas

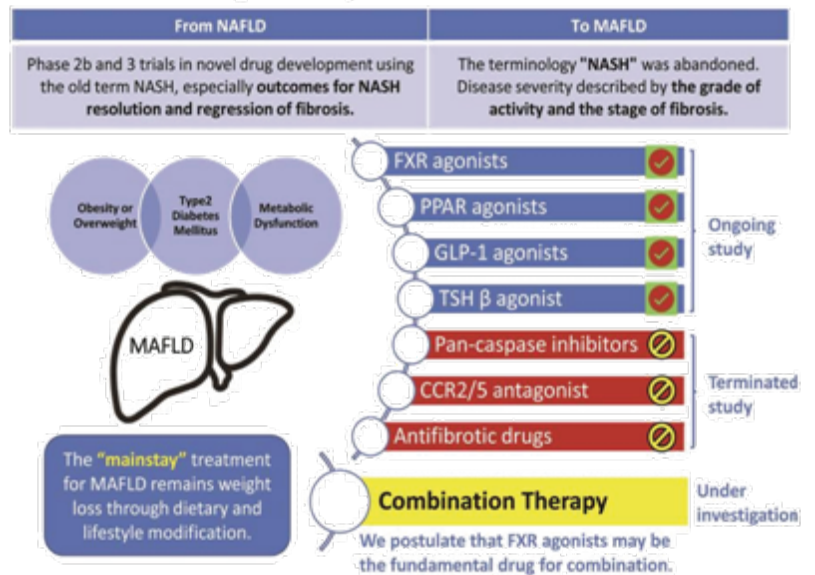
- 16.6% in Western India
- 24.5 % in Eastern India
- 32% in South India
- 53.5 % in North India



Screening and Diagnosis of NAFLD



Pharmacological Therapeutics: Current Trends for MAFLD



Conclusions:

MAFLD is a new clinical definition for fatty liver disease that shifts NAFLD from a disease of exclusion to one of inclusion, where the pathogenic processes originate from underlying metabolic dysfunction. Because MAFLD is not a widely used term in the scientific literature, most published data focus on NAFLD. The latter as an epidemic is tightly linked to T2DM, which is known to frequently coexist with and synergistically increase the CVD risk.

We are still unsure whether the diagnosis of NAFLD can be used as a tool to improve cardiovascular risk and

modify treatment. Lifestyle interventions are recommended by the European clinical guidelines as the best therapeutic option for NAFLD. Moreover, >7% weight loss improves steatosis significantly, resulting in a lowering of the NAFLD activity score (NAS).

However, only 40% of patients in one study reached that goal and reduced steatohepatitis, underlining the difficulties in managing NAFLD with lifestyle changes alone. Nevertheless, reduction of fructose should be recommended for patients with NAFLD along with emerging therapies that can lower the activity of liver enzymes, fibrosis, and inflammation, such as PPAR inhibitors (pioglitazone), SGLT-2i, and GLP-1 RA, as well as modification of the gut microbiota.

Every day in the Gastroenterology OPD at Howrah ILS Hospitals, we happen to witness the surge of NAFLD cases (contributing to 30% of the total burden) presenting with abdominal pain, increased fatigability, palpitation, and distressing Upper GI Bleed. No wonder that it is a curse of our present ways of living, and only realizing this and taking timely lifestyle measures can help us get rid of this menace.



Prof. (Dr.) Sandeep Gupta
M.S., M.Ch (Urology)

The first Indian publication on supine PCNL was in 2007, which was from Mujibhai Patel Urological Hospital, Nadiad, Gujarat. After that, there were only a few publications on this unique technique.

This technique is not used frequently because of the fear of colonic injury and the limited experience of urologists in executing this procedure.

Supine PCNL to be an immensely convenient and time-saving practice, with a higher stone-free rate compared to prone PCNL. It also provides the urologist with the ability for simultaneous antegrade and retrograde manipulations for stones in the ureter and the kidney and thus reduces operative time. It reduces the need for additional support staff. I firmly believe that every endourologist must familiarize himself or herself with this novel and emerging technique.

Currently, it is generally accepted that prone and supine PCNL has equivalent stone-free rates and complication rates based on several prior publications, including mine. I perform Supine PCNL on a regular basis and find it to be immensely convenient for me, my assistant, the OT staff, and the anesthesiologist, as well as the patient. My journey of Supine PCNL from 2015 to date has been very smooth and pleasing, without any major complications so far.

THE ART OF SUPINE PCNL

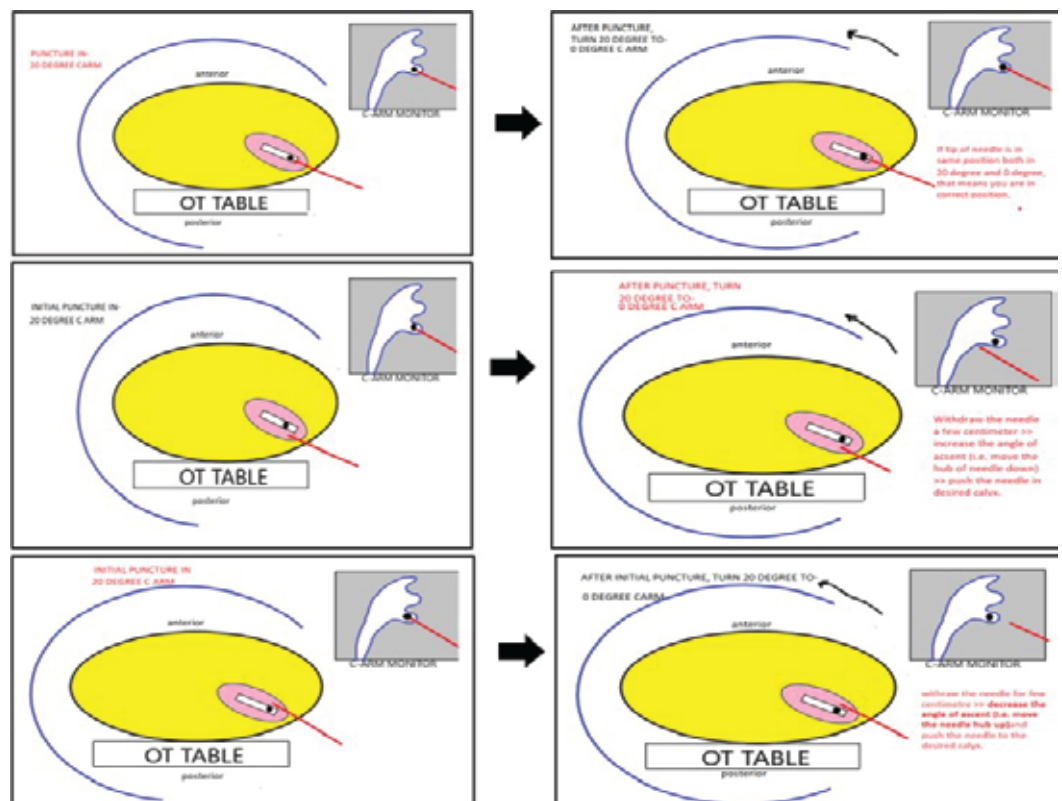


Figure 3: Different positions the needle with respect to stone at 20 degree and then at 0 degree.

Supine PCNL advantages

1. Optimal cardiovascular and airway control is better in high-risk patients (like those with heart failure and obesity)
2. No patient repositioning is needed
3. Better stone fragment washout due to horizontal dorsal sheath angle
4. Less risk of colonic injury
5. Opportunity for a combined approach (ECRIS)
6. Less overall X-ray exposure

Supine PCNL disadvantages

1. Limited space for renal puncture and nephroscope mobility
2. The upper pole calyx is more medial and challenging
3. More complex dilation due to high kidney mobility
4. Increased risk (in the upper pole) of spleen-liver injury
5. Decrease the filling of the collecting system.
6. Spinal interposition in X-ray PA projections
7. Longer tract length
8. Not favorable in abnormal kidneys (like a horseshoe kidney, a malrotated kidney, etc.). (Although I have done and published supine PCNLs in horseshoe kidneys and calyceal diverticular stones.)

A Case of Hyperinsulinemia Hypoglycaemia in IUGR baby



Dr Sayan Bhowmik
Consultant Paediatrician
ILS Hospitals Agartala

A baby was born in ILS Agartala on January 5, 2023, via emergency caesarean section (due the reversal of diastolic flow) at 35 weeks of gestation. The baby was grossly IUGR and had a very low birth weight of 1.2 kg; hence, it was admitted to the NICU and put on CPAP. During the course of her stay, the baby had multiple episodes of hypoglycemia that were not corrected by feeds; hence, IV fluids were started at a GIR of 6 with 6-hourly monitoring of blood glucose. Initially, hypoglycemia was attributed to the IUGR status of the baby. The baby continued to have hypoglycemic episodes,

hence GIR was gradually increased, and finally blood glucose stabilized at GIR 8.

Gradually, the baby's condition improved, feeds were increased, and fluids were tapered. But the baby continued to have a hypoglycemic episode when GIR was reduced below 7, hence a critical sample was sent at a blood glucose level of 37 mg/dl. The results revealed very high serum insulin levels (19.56 ul/ml), low beta-hydroxybutyrate levels (0.02 mmol/L), and normal serum cortisol levels, hence the diagnosis of hyperinsulinemic hypoglycemia was made. The possible causes of



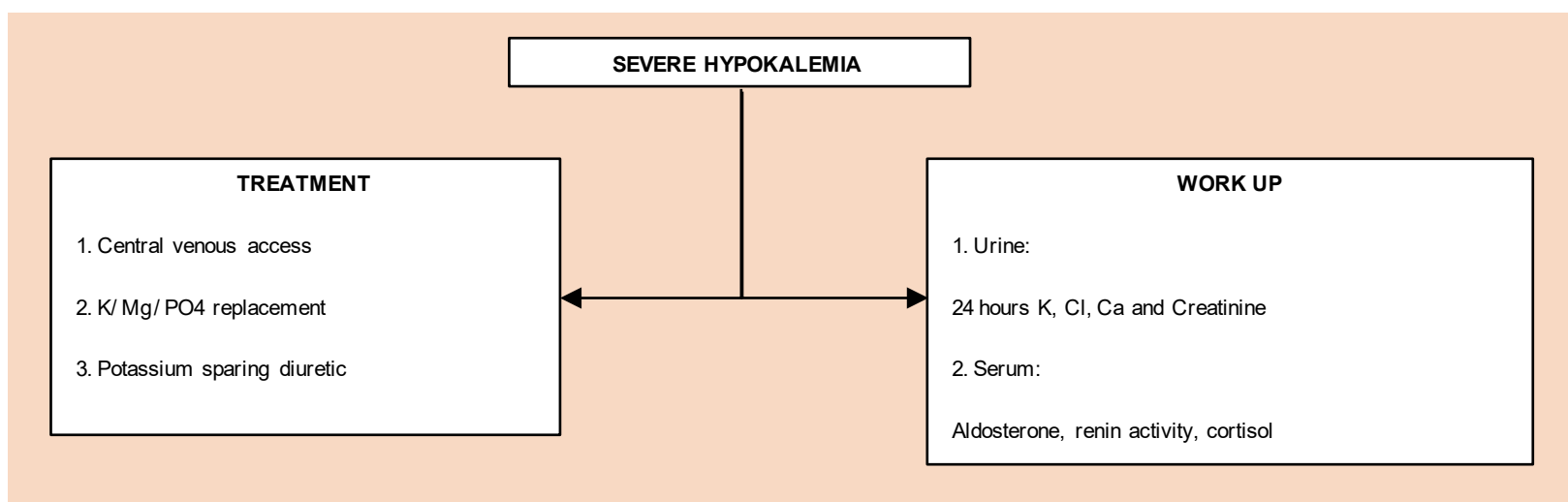
hyperinsulinemia explored at this stage were Small for gestational age. Insulin-secreting tumors Mutations involving genes encoding B-cell ATP-sensitive potassium channels. The baby was started on subcutaneous octreotide as diazoxide was not readily available. No further episodes of hypoglycemia were noted after octreotide was added and fluids were gradually tapered off. Oral diazoxide was added at 15 mg/kg/day in 3 divided doses. Blood glucose was maintained for 48 hours, so octreotide was tapered and stopped. The baby was discharged after a perilous 21-day NICU stay on oral diazoxide with stable blood glucose. In follow-up, diazoxide was also tapered and

stopped over the course of the next month, and the baby is perfectly okay now.

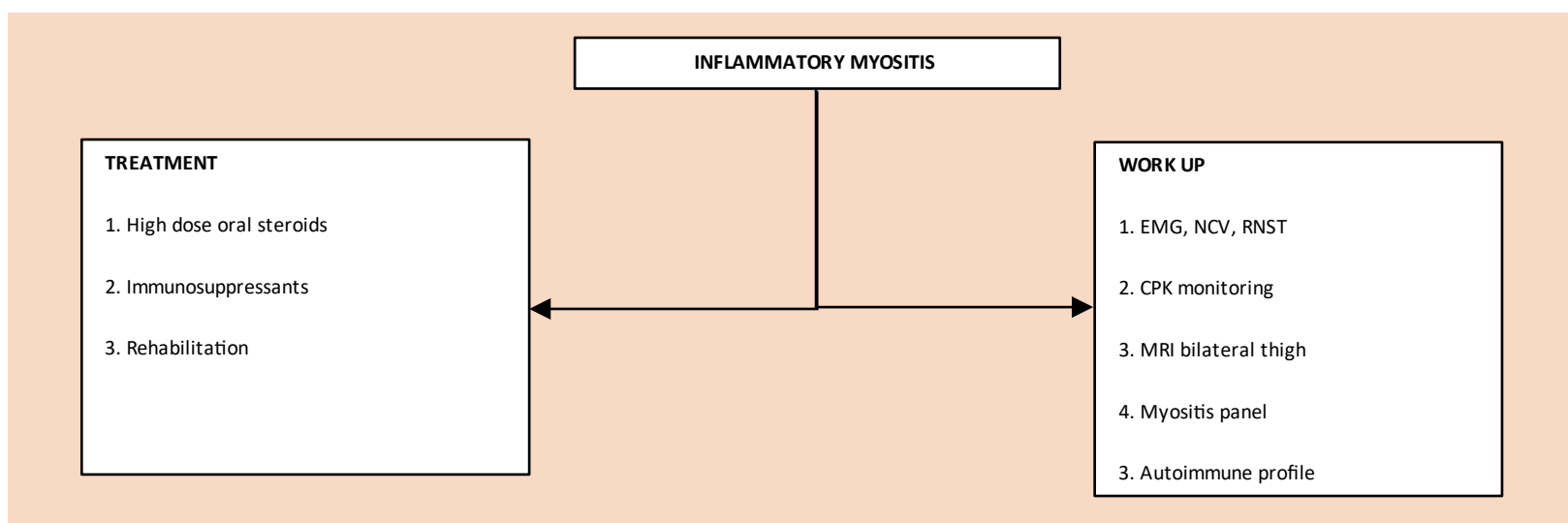
This was the first case of hyperinsulinemic hypoglycemia diagnosed and treated in the state of Tripura; hence, multiple logistical issues were faced, both in terms of investigations and drugs, neither of which were available in the state. Even a greater challenge was explaining to the parents the very complex pathophysiology of the disease. Ultimately, the parents were very happy to take home a healthy baby when they were expecting the worst initially.

Multi-disciplinary approach was adapted, and the critical care team and nephrology team was consulted. The proposed plan of management was as follows:

Approach to Hypokalemia :



Approach to Inflammatory Myositis:



A systematic approach to rare syndromes is essential when there are multiple clinical cues in the same patient. Often, atypical occurrences of clinical symptoms tend to confuse the clinician. The principle of exclusion is often incorporated for identifying the underlying problem when syndromes are indistinguishable. After extensive investigation, the patient was finally diagnosed

with channelopathy (Gitelman syndrome) with inflammatory myositis. A muscle biopsy was not done, as the patient's relatives did not want to incorporate invasive methods since the patient's clinical condition was improving.

She came to us in a wheelchair, but she walked out of the hospital on her feet, with completely reclaimed muscle power.

Case Report :

Isoniazid Induced Acute Cerebellitis: A Rare Phenomenon



Dr. Himansu Shekhar Mohanty

MBBS, DNB, Fellow in
Oncoradiology (European
Society of Radiology)
Dr. Arnab Kar, MBBS, MD
(Internal Medicine)
Department of Imaging &
Interventional Radiology, ILS
Hospitals, Howrah

A 55-year-old male patient presented to the ER department of ILS Howrah with the acute onset of dysarthria and gait disturbance.

On clinical examination, he had no limb weakness. BP and other vital parameters were within normal limits.

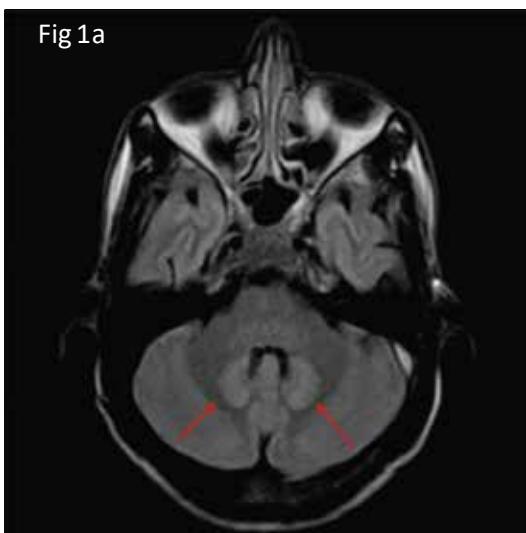
To investigate further, a plain CT brain scan was done, which did not reveal any significant abnormality.

Cerebrospinal fluid (CSF) analysis did not show any signs of infection. Metronidazole toxicity was suspected, but there was no drug history for that kind. Through the process of diagnosis by exclusion, we have made a possible diagnosis of INH (isoniazid)-induced cerebellitis. On retrospective inquiry, it was found that the patient had been

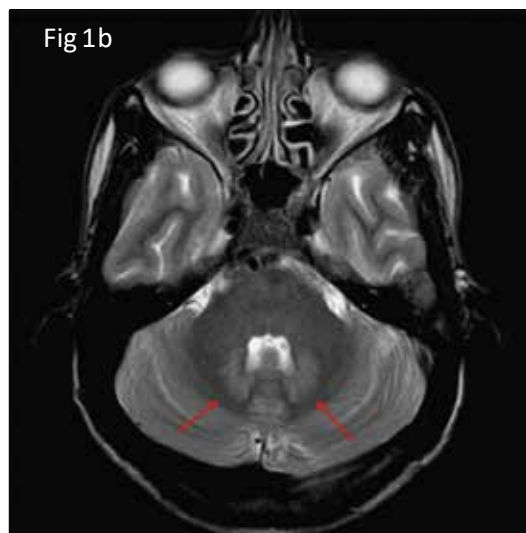
started on anti-tubercular therapy, including INH, a few days ago due to some bone infection. His ATT was stopped as there was no evidence of tuberculosis. The patient improved within a few days as drug-induced cerebellitis is a reversible phenomenon.

Imaging Findings:

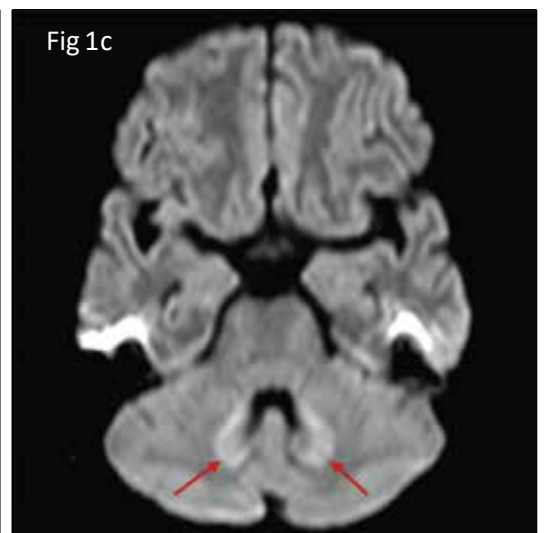
Hence, an MRI of the brain was done, which revealed areas of bilateral and symmetrical T2 and FLAIR hyperintensities (Fig. 1a) in the dentate nuclei of the cerebellum. The corresponding areas also showed hyperintensity in diffusion-weighted imaging (DWI) without any signal changes in apparent diffusion coefficient (ADC).



1a: Axial FLAIR image shows bilateral symmetrical hyperintense signal in dentate nuclei of cerebellum



1b: Axial T2 W image shows bilateral symmetrical hyperintense signal in dentate nuclei of cerebellum



1c: Axial DWI shows the bilateral symmetrical hyperintense signal in dentate nuclei of cerebellum

Conclusion:

Isoniazid, an antitubercular therapy (ATT) drug, is both neurotoxic and hepatotoxic, but cerebellitis is a rare complication. INH-induced cerebellitis should be considered in the differential diagnosis of bilateral dentate nuclei hyperintensity, especially in patients with renal

function impairment. Early diagnosis and treatment in the form of INH withdrawal and pyridoxine supplementation can potentially reverse the oedema and cause dramatic improvements in the patient's symptoms.

New members in our family of ILS Hospitals



Dr. (Major) Bharbi Chattopadhyay

Chief Operating Officer
MBBS (A.F.M.C. Prime) Family Medicine (GDFM, Singapore)
Rheumatology (PG PGM, Johns Hopkins, USA)
Hospital Administration (MBA-HA) Quality Mgmt (PG Cert-QM & AHO) ILS Hospitals, Agartala
Mobile : 8974050303



Dr. Nirankar Dev

MBBS, MS (General Surgery), M.Ch- Neuro Surgery
Department - Neurosurgery
ILS Hospitals, Agartala
Mobile : 9891592741



Dr. Antara Roy

MBBS, MD-Microbiology
Department - Pathology
ILS Hospitals, Agartala
Mobile : 7085967979



Dr. Debanu Das

MBBS, MEM
Department - Emergency
ILS Hospitals, Agartala
Mobile : 8017175969



Dr. Nodee Chowdhury

Consultant - Neurologist MBBS (Hons) MD General Medicine (Gold Medalist) DrNB
Neurology
ILS Hospitals, Howrah
Mobile : 9051205132



Dr. Arjun Ray

MBBS, MD (Gold Medalist), DM (Nephrology) Nephrology
ILS Hospitals, Howrah
Mobile : 9432311991

Advanced robotic surgery for abdomen at Salt Lake hospital

The ILS Hospital, Salt Lake, has introduced advanced robotic surgery for procedures of the abdomen that will allow clearing tissues that were inaccessible in conventional laparoscopic surgery and help eliminate a disease better.

**Total Robotic surgery:
112 (Till March 2023)**



“Emergencies in Medical Practice – Golden Hour Management”

in the Annual Program of IMA North-West Calcutta

On July 24, 2022, the ILS Academics and Research Foundation, under the aegis of IMA North-West Calcutta, brought together practising clinicians and specialists attending emergencies in their day-to-day practice to present in the annual programme of IMA North-West Calcutta under the conference title “Emergencies in Medical Practice: Golden Hour Management,” which was structured on awareness of the

initial management of the “golden hour before transferring the patients to a higher centre. The conference was composed of a special inaugural ceremony of IMA North-West Calcutta and twelve academic sessions consisting of panel discussions and lectures by specialists, aimed at updating practitioners and experts.

Some glimpses of the conference





Dr. Poonam Kapoor
 MBBS, MD (PTH), BHU
 Consultant Histopathologist, ILS Hospitals
 Laboratory Head, ILS Hospitals