## Case Study...

This 17 months old boy-Daksh Rana (D.O.B: 02/12/2014) was presented for the physiotherapy treatment on 15<sup>th</sup> April 2015 at the Amar Jyoti Neuro Rehabilitation Center. Parents got the child for intervention at the age of 4 months with the chief complaints of having uncontrolled fits and inability to perform any activities as per his age group.

Child was born Full term with Normal vaginal route (induced episiotomy) and was apparently well till Day-9 of life. On Day-12, baby developed multiple episodes of abnormal movements of all four limbs (Rt side>>Lt side) in the form of Generalised Tonic Clonic Seizures (GTCS) with uprolling of the eyes and loss of sensorium. <u>CSF</u> examination revealed signs of meningitis. <u>MRI (Brain)</u> also revealed a well defined haematoma in the Left temporo-paerital lobe with relatively smaller haematoma in the Right temporal lobe with subarachnoid haemorrhage (SAH) and Intraventricular haemorrhage (IVH). <u>EEG</u> dated 4/2/2015, suggested moderate severely abnormal multifocal spikes with interhemispheric asymmetry and asynchrony. He was then started on antibiotics and multiple antiepileptic drugs.

Comparative Examination and Evaluation of the Child:

At Age of 4 months	At Age of 18 months
Significant fits ranging from 200-300/ day	Fits decreased to 4-5/day.
<ul> <li>No significant alertness.Completely lethargic.</li> </ul>	Child much alert and awake.
> HC=36cm (Normal at 3 months is 40cm)	➤ HC=42.5 cm (Normal at 1 year is 46 cm)
<ul><li>No Social Smile.</li><li>No Eye contact.</li></ul>	<ul> <li>Social Smile present.</li> <li>Maintains eye contact for atleast 15 to 20 counts.</li> </ul>
No Visual focussing/ tracking.	<ul><li>Visual focusing present. Enjoys watching TV.</li></ul>

- No alertness to noise/sound.
- Feeble cry.
- No midline orientation. Keeps arms flexed and abducted.
- Tendency to keep his head rotated to right side only.
- ➤ ATNR predominant. Rt side>> Lt side. (Normal for 4 months of age)
- ➤ Hands fisted and cortical thumb present most of the time.
- ➤ No signifiantly appreciable increased tone.??
- Not able to move in supine/ prone posture.
- No head control
- Appreciable tightness in TA, Hams, Biceps Brachii & Pronators
- Was on liquid diet only and intake was too less.

- Attends & localizes to the source of sound.
- ➤ Vocalization & Cooing
- Midline orientation present.Brings hands to mouth.
- ➤ Is able to turn his head equally on both sides.
- ATNR partially integrated.
   Intermittantly observed on Rt side >>Lt side.
- ➤ Hand and thumb opening present.
- Generalised increased in tone appreciable. (catch and release)
- Can come from Supine to Rt side lying but not to Lt.side lying.
- Partial head holding, only for a count of 5-6, then head drops down.
- Tightness much reduced than before.Much flexibility with increased movt appreciable.
- ➤ Diet intake has increased. Can take everthing in semisolid forms, though does not chew much.

## Management:

- 1. Referral for evaluation of Developmental Quotient, Early Intervention Program, Occupational Therapy & Speech Therapy.
- 2. To continue follow up from Ganga Ram hospital for antiepileptic medications.
- 3. Lifting, carrying and handling techniques.
- 4. Mobile stand to facilitate sensory-motor play.
- 5. Use of various textures for sensory integration.
- 6. Gentle rocking activities on gym ball.
- 7. Use of hammock to facilitate movement.
- 8. Avoid massage.
- 9. Gentle passive movements to maintain flexibility and prevention of occurrence of contractures/ deformities.
- 10.NDT to facilitate movement & developmental sequence.
- 11. Postural change on body, wedge and bolster.
- 12. Weight bearing activities like quadruped, kneeling to facilitate proprioceptive input.
- 13. Prone on wedge to facilitate head control & weight bearing on forearms & hands.
- 14. Supported Standing experience.
- 15.Increase vocalization during function chores.