



NEONATAL SEIZURES : A Comprehensive Review of Clinical Dynamics, Miasmatic Etiopathogenesis, and Homoeopathic Therapeutics

Author 1 : Dr. Sonia Parmar BHMS (MD)

Professor and HOD (Deptt of Obstetrics and Gynaecology)

P.P. Savani Homoeopathic Medical College and Hospital.

Dhamdod, Kosamba, Surat-394125, Gujarat, India.

Author 2 : Dr Kosmika Makwana BHMS (MD)

Professor and HOD (Deptt of Homoeopathic Pharmacy)

P.P Savani Homoeopathic Medical College and Hospital.

Village-Dhamdod, Kosamba, Surat-394125, Gujarat.

ABSTRACT

BACKGROUND : Neonatal convulsions represent a critical neurological emergency and a primary indicator of brain dysfunction in the newborn.

OBJECTIVE : This review aims to synthesize current neurobiological understanding with a structured Homoeopathic miasmatic framework. **Methods:** A literature review was conducted integrating pediatric neurological standards (Nelson, Volpe) with classical Homoeopathic principles.

RESULTS : Seizures were categorized into Psoric (functional), Sycotic (structural), and Syphilitic (destructive) dynamics. Differential therapeutics for remedies such as Belladonna, Cicuta, Cuprum Met, and Arnica were detailed. **Conclusion:** An integrated approach utilizing biochemical stabilization and individualized miasmatic prescribing offers a robust pathway for managing neonatal neurological distress.

KEYWORDS:

Neonatal Seizures, HIE, GABA, Miasmatic Dynamics, Individualization, Homoeopathy, Organon §284.

1. INTRODUCTION:

Convulsions are the most distinctive manifestation of neurologic dysfunction in the newborn infant. As documented in the Nelson Textbook of Pediatrics, seizures occur more frequently in the neonatal period than at any other time in life [1]. These events often herald potentially devastating forms of brain injury, with an incidence of 3 per 1,000 full-term infants and up to 60 per 1,000 premature infants [5]. Given the adverse

effects on neurodevelopment, early diagnosis and treatment are essential to prevent cognitive, behavioral, or epileptic complications later in life.

2. PATHOPHYSIOLOGY AND NEUROBIOLOGY

The susceptibility of the neonatal brain to seizures is due to an evolutionary imbalance. Excitatory processes dominate, as glutamatergic synapses mature faster than inhibitory GABAergic synapses. Paradoxically, GABA—the primary inhibitory neurotransmitter in adults—may act as an excitatory agent in neonates due to differences in chloride gradients [16]. This developmental feature explains the high tendency toward status epilepticus and the reduced efficacy of standard GABA-ergic drugs in this age group [13].

3. ETIOLOGY AND CLINICAL CLASSIFICATION

Etiology is often age-dependent, ranging from perinatal complications like HIE and birth asphyxia to metabolic issues like hypoglycemia and hypocalcemia [11, 14]. Clinical presentations are classified into four major types:

- Subtle Seizures (50%): Manifesting as ocular deviation, lip-smacking, or "pedaling" limb movements.
- Clonic Seizures: Rhythmic jerking (1-3 jerks/sec), often signaling focal cerebral injury [7].
- Tonic Seizures: Sustained limb extension/flexion, frequent in preterm infants with severe intraventricular hemorrhage [9].
- Myoclonic Seizures: Rapid, flexor jerks associated with deep-seated encephalopathy [10].

4. THE MIASMATIC DYNAMICS: THE DYNAMIC ROOT

In Homoeopathic science, a seizure is the acute manifestation of an underlying chronic miasmatic dyscrasia. The "Miasmatic Load" inherited by the neonate dictates the pathological trajectory:

- Psoric Miasm: Represents functional irritability and hyper-reactivity. Seizures are often "Subtle" and triggered by physiological shifts (hypoglycemia). It represents a dynamic disturbance without structural change.
- Syphilitic Miasm: Associated with structural abnormalities and "excess." This includes cerebral dysgenesis, hydrocephalus, or maternal TORCH infections.
- Syphilitic Miasm: The most devastating background, manifesting as HIE, intracranial hemorrhage, or degenerative brain changes [5]. This represents the destructive stigma of tissue loss and necrosis.

5. HOMOEOPATHIC THERAPEUTICS

Prescriptions are selected based on the totality of symptoms, modalities, and the dominant miasmatic stigma.

Differential Therapeutics in Neonatal Spasms:

- Arnica & Natrum Sulph: Critical for seizures following birth trauma, instrumental delivery, or intracranial hemorrhage [3].
- Belladonna: Sudden onset, intense cerebral congestion, heat, and dilated pupils.
- Opium: Characterized by deep stupor, stertorous breathing, or seizures following profound fright [2].
- Cuprum Metallicum: Violent, exhausting convulsions starting in the fingers and toes [3].
- Cicuta Virosa: Violent distortions and opisthotonos. Triggered by the slightest touch or noise.

- Hyoscyamus: Dominant twitching and jerking with nervous excitability and "picking" at bedclothes.
- Stramonium: Seizures with "terrors"; eyes wide open and rhythmic, graceful movements.
- Apis Mellifica: Specific for meningeal irritation with the characteristic shrill "brain-cry" and lack of thirst.
- Zincum Metallicum: Indicated in cases of cerebral exhaustion where the vital force is too weak to develop symptoms fully [2].

Potency and Dosing: Preference is given to liquid dilutions to stimulate the Vital Force gently without triggering a state of status epilepticus [4].

6. CONCLUSION

Neonatal seizures require a multifaceted management strategy that identifies the underlying biochemical cause while addressing the dynamic miasmatic background. While conventional medicine provides essential acute stabilization, Homoeopathy offers a path toward preventing long-term neurological sequelae.

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