

In this patient, the baseline MSLT had shown three SOREMPs of four sessions. There was no SOREMP on the follow-up MSLT with tryptophan. This result may be accounted for by the fact that tryptophan as the metabolic precursor of serotonin acted as a REM sleep suppressant [7]. Another explanation for the effect on REM sleep might be that hypothalamic prolactin, which exists in the same neurons as hypocretin/orexin, is considered to play important role in REM sleep regulation [8] and might have a hypnotic effect via another neurotransmitter *i.e.* VIP [9].

Some studies have reported the role of growth hormone treatment in improving the sleep-disordered breathing in PWS, but a subset of patients had worsening of symptoms 6 weeks after starting growth hormone [10]. However, the apnea index of this patient did not meet the diagnosis of sleep apnea.

We conclude that in PWS patients tryptophan might be a useful pharmacologic treatment for excessive daytime sleepiness.

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## Umbilical Myiasis in Newborn

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Umbilical myiasis is rare in newborns. We are reporting two cases of umbilical myiasis from rural West Bengal (India) that were infected by larval forms of blow fly (*Chrysomya megacephala*). One of them subsequently developed septicemia while the other one was clinically well.

**Keywords:** Myiasis, Neonate, Umbilical.

**M**iasis is an animal or human disease caused by the immature stage (maggots) of flies which feed on the host's necrotic or living tissue[1].

Myiasis may affect humans reared in poor hygienic conditions. It is more common in children less than five years of age and with a rural background [2]. Myiasis in the human neonatal period is a rare

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occurrence and almost exclusively found in neotropic areas [3].

### CASE REPORT

**Case 1:** A nine-day-old, tribal male baby, born at home out of non consanguineous marriage belonging to a poor socioeconomic status from rural Bengal was admitted with complaints of refusal to suck, and discharge from umbilicus. The baby was born by normal vaginal delivery conducted by a local *Dai*, cried immediately after birth. Antenatal period was uneventful. Mother had received two doses of tetanus toxoid during pregnancy.

The baby weighed 2.1 kg and was lethargic, with subnormal cry and reflexes. Temperature was slightly elevated. Vitals were stable and anterior fontanel was soft and pulsatile. Abdomen was slightly distended, liver and spleen was just palpable and soft. Foul smelling purulent discharge from umbilicus with periumbilical flaring was noted. On close observation after removal of pus with sterile cotton swab, the tip of some white spindle shaped mobile worm like structures were noted. These on pulling out with forceps proved to be a maggot. Hemogram, urine and CSF analysis were normal. Ultrasound scan of the umbilical area showed another twelve maggots and, as soon as all larvae were out of the epidermis, the cellulites rapidly resolved with no sequelae. Blood culture and culture from the umbilical swab revealed growth of *Staphylococcus aureus*. The baby was treated with intravenous cefotaxime and netilmycin for 7 days.

**Case 2:** A six day old female neonate presented with history of something coming out from the umbilical region. This baby was delivered vaginally at our medical college. The intra and post natal events of mother were uneventful and both mother and child were discharged from hospital on next day.

On examination this neonate weighed 2.8 Kg. Her cry, reflex and activities were satisfactory and all vital parameters were within normal limit. The gangrenous cord was partially attached at umbilicus and movements of some maggots were noted at the umbilicus (**Fig 1**). In the next 3 hours, 13 maggots bored out of umbilicus following instillation of ether (repellent). Ultrasound examination showed another

6 maggots and they also were removed similarly. Following removal the maggots were preserved in 80% of alcohol and sent to School of Tropical Medicine, Kolkata for microscopic examination and species identification. The maggot was found to be of *Chrysomya megacephala*. Blood samples were collected from the neonate and all the reports were within normal limits. There was no evidence of sepsis and the infant was discharged from the hospital on the 3rd day under satisfactory physical and clinical condition.

### DISCUSSION

Umbilical myiasis, a type of cutaneous tissue myiasis, is usually produced by larvae of flies which are found in wounds and gangrenous tissue where they act as facultative parasites feeding on necrotic tissue and occasionally healthy tissue. In umbilical myiasis the fly lays eggs on dry skin and the larvae subsequently invade the wound and feed rapaciously on healthy tissue, usually in groups to produce characteristic pocket like injuries. Larvae grow rapidly and reach maturity in 4-8 days [4].

The larvae are removed from the affected site of the host by irrigation, manipulation or surgery [5]. The larvae should be killed in hot water to retain the overall shape as the posterior spiracles are very important for species identification. Identification of the maggot can be crucial in determining pathogenesis and as well as controlling of the



**FIG. 1** A few maggots and partially attached gangrenous cord at umbilicus of a newborn.

disease. Third stage larva is ideal for species identification [5].

*Chrysomya megacephala*, more commonly known as the Oriental Latrine Fly, is known to breed in human feces, meat and fish. In the rural Indian population, defecating in open air is a common practice. The fly is attracted by feces and lays eggs on them. After landing on feces it lands commonly on human foods and on very rare occasion on open human wounds or on umbilicus of a newborn [6]. These may be the events that lead to umbilical myiasis in the two cases that we have reported.

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## Hormone Dust Exposure – A Reversible Cause of Precocious Pseudopuberty in Siblings

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A seven year old female child presented with two episodes of vaginal bleeding and bilateral breast development. Examination showed normal anthropometric measurements and external genitalia of prepubertal type. Her 5-year old younger brother and her father had gynecomastia. Search for a structural cause for precocious puberty was negative. Occupational exposure of her father to hormonal dust was identified as the cause. All pubertal changes reverted to normal after observing suitable precautions.

**Key words:** *Hormonal dust exposure, precocious pseudopuberty.*

**P**recocious puberty can occur due to exogenous hormone administration in the form of oral hormone pills, estrogen containing creams, cosmetics, as well as estrogen contaminated food. We report an unusual estrogen exposure leading to precocious

pseudopuberty in two siblings and gynecomastia in their father.

## CASE REPORT

A seven year old female child was brought by her mother with a history of two episodes of vaginal