Street Heroin Poisoning in a Seven-Month-Old Infant

In India, a higher incidence of substance misuse is seen in infants especially because of their dependency on others. This is more prevalent among low socio-economic class and rural areas(1). Here we report a case where a seven-month-old irritable infant was given street heroin by father to lull her to sleep.

A 7-month-old female infant was brought to us in drowsy state. On enquiring, it was revealed that one 'puria' of powder was given to the baby by her addicted father. The detailed nature of powder was not available as the accompanying persons were neighbors. There was no history of convulsions, excessive irritability or frothing from mouth.

On examination, the baby was lethargic and drowsy. Rectal temperature was 36°C, heart rate was 96/min, blood pressure was 90/50 mm Hg, and respiratory rate was 16/min, sighing and irregular with poor chest expansion. There was no cyanosis. Central nervous system examination revealed bilateral reacting miotic pupils and marked hypotonia. Other systems were within normal limits.

Investigations revealed hemoglobin 13 g/dl, leukocytes 12,000/mm^3 (neutrophils 66%, lymphocytes 32% and eosinophils 2%) and peripheral smear did not show any evidence of septicemia. Blood sugar was 100 mg/dl, blood urea 22 mg/dl and serum sodium and potassium levels were within normal range. Chest and skull skiagram were normal. Lumbar puncture was deferred in view of an urgent need for ventilatory support.

Stomach wash was given and intravenous fluids started. She was put on respirator and maintained on it for six hours when she became stabilized. Subsequently, she was weaned off from the ventilator. She became perfectly alright and was discharged on the very next day of admission.

Drug abuse is a major problem around the world and is not uncommon in our set up(1). Often it is used for religious purposes in India, *e.g.,* bhang (*Cannabis Indica*)(2). Working mothers give 'hafim' to their irritable babies. Quacks and even qualified doctors also use various form of atropine derivatives (neopeptin, piptal drops) for abdominal colic. Alcohol containing compound (Pudinhora and gripe water) are also used in cases of irritable babies. Besides phenothiazine, barbiturates and diazepam are also freely available for abuse. Opium as an antidiarrheal is used widely(2) and constitutes about 9.83% cases of accidental poisoning in children(3). Although accidental poisoning is most common among 1-3 year old(2), infants are at the mercy on their parents and are vulnerable to be abused with medicaments. Freely available street heroin in our society has definitely increased the likelihood of its being abused in babies of addicted parents.

This baby had a clear history of being given some powder after which she developed marked hypotonia, miotic pupils and respiratory depression. These characteristic features of opiates overdosage helped

us to differentiate it from phencyclidine or cocaine poisoning where irritability, tachypnea and muscular rigidity predominates(4). Opiates characteristically depress the brainstem respiratory centres responsiveness to carbon dioxide and also medullary respiratory centre via the beta 2 receptors(5), causing marked respiratory depression. Death in opiate poisoning is nearly always due to respiratory arrest(5).

The baby was saved because of an early stomach wash and prompt respiratory support. The powders available in the market for addiction are adulterated with various substances and the clinical picture depends upon the content of the powder. An awareness about the existence of such substances and its possible misuse in infants has to be kept in mind while dealing with such pediatric emergencies.

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Cerebral Granulomatous Candidiasis in a Neonate

Septicemia caused by candidal infection in neonates is rare(1). When it involves the central nervous system, it causes meningitis and microabscesses. Chronic granulomatous candidiasis has been described in adults but is rare in children(2).

A 30-week-old female preterm baby, with a birth weight of 1.250 kg was admitted for preterm care. She was given one unit of exchange blood transfusion. Later, the child developed neck retraction and vomiting. CSF examination at this time showed proteins 200 mg/dl and sugar 20 mg/dl. Cells were 300 polymorphs/cu mm. CSF culture did not reveal any growth. The child was kept on broad spectrum antibiotics and CSF examination four days later was normal. Blood culture was negative. After two weeks, the child developed loose motions, depression of higher functions and expired.

Autopsy revealed the child was malnourished. The cerebral cortex showed scattered yellowish necrotic areas. Microscopic examination showed normal meninges. There was edema of the white matter and multiple granulomas formed of epithelioid cells and giant cells, with hyphae and budding forms of *Candida* (*Fig.*).

Systemic and deep parenchymal infections caused by *Candida* have received