Unique Injury due to Reuse of CPAP Cannula

Continuous positive airway pressure (CPAP) is used widely as a non-invasive modality of respiratory support in neonates [1]. However, the most important challenge in optimal use of the CPAP is a safe and comfortable interface; every interface causes injury to a variable extent [2]. The RAM cannula is now being widely used as this is simple to apply and has less potential of injury compared to other interfaces. Reuse of these cannulas is not recommended but in resource-limited settings, these are being reused after disinfection with routinely used disinfectants like glutaraldehyde.

We report a unique contact burn injury with use of reused RAM cannula in our hospital. A preterm baby, who was having respiratory distress at birth, was administered CPAP using RAM cannula. She developed linear contact burn injury on day 2 of use of the cannula (***Fig.* 1**). On investigation and analysis, it was attributed to chemical burn by 2.5% glutaraldehyde used for the chemical disinfection of the cannula. The retained chemical caused a contact chemical dermatitis. Similar reports are available for other instruments like transesophageal echocardiography probes [3].

As the reuse of these cannulas is widely practiced in the resource-constrained settings, due care should be taken to use the correct dilution of the chemical disinfectant, and the same should be thoroughly washed with sterile water for removal of the residual chemical before applying cannula to the infant. Ideally, these cannulas should not be reused.

FIG. 1 *Linear injury mark over face. (See color image at website)*

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Bilateral Parotid Swelling After Viper Envenomation: An Ominous Sign?

A 7-year-old girl was admitted to our hospital 15 hours following a snake (viper) bite on her right foot. She received 10 vials of anti-snake venom (ASV) at the local hospital before referral to our institute.

On examination, she was drowsy with Glasgow Coma Scale (GCS) score 11/15. The swelling, induration and tenderness of the local area extended to the knee joint. Her eyes were puffy and she had anuria for last 12 hours. Complete hemogram showed hemoglobin 10.6 g/dL, total leucocyte count 12000 /cumm and platelet count 139000/ cumm. Serum urea and creatinine were 8 mg/dL and 1.1 mg/dL, respectively. Serum sodium and potassium levels were 136 and 3.8 mEq/L. Bleeding time (BT), prothrombin time (PT) and activated plasma

thromboplastin time (APTT) were normal. She was given intravenous cefoperazone and 15 more vials of ASV.

Two hours later, her GCS improved and she passed 80 ml of urine. Her Parotid glands on both sides were now swollen (***Fig.* 1**) and tender with normal overlying skin. Her clinical status worsened in next 2 hours, and she developed hypotension and muffling of heart sounds. She was put on inotropes and other supportive care but could not be revived.

The clinical manifestations of viper bite vary from minor local symptoms to life threatening hepatotoxic or vasculotoxic features. Bilateral parotid enlargement is mentioned as one of the clinical signs of viperine envenomation in the Indian National Snakebite Protocol 2009 [1]. However, this is a rare clinical sign, and has been only occasionally reported in adult victims [2,3]. The cause of parotid swelling in viper bite is unknown, but it seems to represent a poor prognostic outcome [4].

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FIG.1 *Parotid swelling in the patient of viper envenomation. (See color image at website)*

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Esophageal Stricture Following Retained Foreign Body in a Child

Infants put almost everything into their mouths and toddlers eat just about anything. The majority of foreign body ingestions occur in children between the ages of six months and three years [1]. Only 10 to 20 percent of foreign bodies require endoscopic removal, and less than 1 percent require surgical intervention [1,2].

Retained foreign body in esophagus is very rare presentation, which may damage the mucosa leading to stricture or fistula. We report a case of 8-yr-old male child who was brought to medical attention with complaints of vomiting after meals and difficulty in swallowing food for the past 4 years, along with cough and noisy breathing for three months. There was a history of ingestion of a 2-rupee coin prior to start of the symptoms, passage of which the parents never noticed subsequently in stools, and they did not seek any further medical attention. After admission, *X*-ray chest was done which revealed a radio-opaque shadow in the mid esophagus; lungs were normal (***Fig.* 1**). Upper gastrointestinal endoscopy revealed a stricture at 12 cm from incisors; proximal esophagus showed diverticulum and the coin was seen distal to the stricture. The stricture was dilated using Savory Gillard dilators and the coin was pushed distally into the stomach. (***Fig* 2**). A contrast *X*-ray swallow (gastrografin) study was normal. After one week, the child passed the coin in the stool. Repeat dilatation was done after 7 days and 21 days. After dilatation, the child started accepting feeds orally without any complaints; there was no requirement of dilatation after three initial sessions.