

Renal profile, coagulation profile and renal doppler studies were normal; anti-nuclear antibodies were negative.

2D and M-mode echocardiography revealed eccentric closure of aortic valve cusps suggestive of cusp damage and moderate aortic regurgitation. There were vegetations involving anterior aortic valve extending into left ventricle. Brain computed tomography (CT) revealed intra-cerebral bleed in the left middle cerebral artery territory. CT angiogram was suggestive of ruptured mycotic aneurysm with perifocal edema and mass effect (**Fig. 1**). The patient was managed conservatively with decongestive measures and intravenous antibiotics for 6 weeks. Neurological status of child improved with residual paresis at the time of discharge.

Mycotic aneurysm rupture often has a disastrous clinical course in which morbidity and mortality can be reduced by early diagnosis and appropriate antimicrobial therapy [1,2]. *Klebsiella* endocarditis, though rare, can have far more devastating consequences [3]. Current management options for mycotic aneurysm include medical, surgical and endovascular therapy. Solitary mycotic aneurysm is known to resolve with medical therapy and surgical intervention is reserved only when

these are multiple, enlarging or not responding to conservative treatment [4].

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SUMI M PILLAI AND VK BHARADWAJ
Department of Pediatrics,
NSCB Medical College,
Madhya Pradesh, India.
vrind_b@rediffmail.com

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Papaya Leaves in Dengue Fever: Is there Scientific Evidence?

With the recent dengue outbreak, the use of papaya leaves as natural cure for dengue has received much interest among the public, and in the lay press [1]. Being easily available and affordable, the use of papaya leaves occurs indiscriminately. The physician however remains unclear of his or her stand on the issue.

The therapeutic effects of aqueous extract of papaya (*Carica papaya*) leaves are presumed to be due to several active components such as papain, chymopapain, cystatin, L-tocopherol, ascorbic acid, flavonoids, cyanogenic glucosides and glucosinolates. These are antioxidants that reduce lipid peroxidation, exhibit anti-tumor activity and immune modulatory effects [2]. Animal studies suggest that papaya leaf extracts have potential therapeutic effect on disease processes causing destabilization of biological membranes as they inhibit

hemolysis *in vitro* [3] and may cause increased platelet and red blood cell counts [4]. A recent open-labelled trial from Malaysia demonstrated significantly higher platelet count after 40-48 hours of first dose of papaya leaves' juice [5]. Others have also reported encouraging findings. In spite of these small scale studies, the fact remains that dengue is a mostly a self-limiting disease with spontaneous increase in platelets during recovery.

The role of papaya leaves cannot be scientifically substantiated based on a few positive preliminary reports. The need of the day is to commission high quality trials in humans to provide scientific evidence for or against papaya leaves. Herbal products are assumed to be safe because they are natural, but this assumption cannot be valued more than mere conventional wisdom. As reported, anticoagulant effect of warfarin was found to be potentiated after consuming an extract of *Carica papaya* [6].

The purpose of this communication is not to raise questions on the use of herbal products for disease management, or to belittle the patients' efforts to use all available measures, whether approved or not, to alleviate

their suffering; but, a call to the research community to generate evidence so that any potential benefits are not discredited. The science must provide evidence to dispel myths and focus efforts on evidence-based management of dengue.

NEETU SHARMA AND *DEVENDRA MISHRA

Departments of Pediatrics, GR Medical College, Gwalior, and

*Maulana Azad Medical College, Delhi, India.

drneetuagarwal@gmail.com

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Reversible Corneal Clouding in Neonatal Hyperglycemia

Corneal clouding, a rare observation in neonates, has been linked to causes such as infections and metabolic disorders. We describe a case of an extreme preterm with bilateral, reversible corneal clouding – possibly due to hyperglycemia.

This preterm (25 weeks) male infant was born vaginally to a primigravida mother; birth weight was 840 g. The child was managed with surfactant, ventilation, parenteral nutrition, cefotaxime and amikacin. On 4th day, baby developed seizures requiring phenobarbitone. Neurosonogram revealed grade-I germinal matrix hemorrhage.

On 6th day, infant developed hyperglycemia, which was managed by insulin infusion. Hyperglycemia lasted for 22 hours (highest blood glucose: 890 mg/dL). Antibiotics were changed to vancomycin and meropenem. Child also developed bilateral diffuse corneal clouding suggestive of corneal edema. There was no conjunctival or circumciliary congestion or eye discharge. View to the anterior chamber and fundus was hazy; a red glow was present. Iris details could not be visualized. Cornea became clearer in the next few days. Mild haze persisted till 28 days and cleared completely

by 39 days. The infant was diagnosed to have retinopathy of prematurity (ROP) at 28 days which progressed bilaterally requiring laser treatment at 41 days. At discharge (81st day) and at 6 months, the cornea remained clear.

Opacification of the cornea in a newborn may occur in congenital glaucoma, corneal dystrophies, Peter's anomaly, sclerocornea, infection, trauma, limbal dermoids and metabolic disorders like mucopolysaccharidoses [1]. The case presented had no signs of ophthalmic infection or dysmorphism. Corneal clouding was reversible unlike in mucopolysaccharidoses. ROP is an unlikely cause since cornea had cleared when ROP had progressed. Drugs given to this infant are also not known to cause corneal edema.

In this infant, severe hyperglycemia could have caused endothelial dysfunction and corneal edema. The Na,K-ATPase in the basolateral membrane of the cornea, is responsible for the pump function [2]. Animal studies show that hyperglycemia reduces Na,K-ATPase activity of cornea [3,4]. In adult humans, acute hyperglycemia affects corneal hydration control [5]. Another mechanism could be hydration of lens, leading to angle closure and rise in intra-ocular pressure resulting in corneal edema. However, digital tonometry was normal in this infant.

We could not find any reported case of corneal clouding in neonates due to hyperglycemia. Although 60-80 percent of extreme preterms develop hyperglycemia, very high levels as observed in this case are rare. We hypothesize that severe hyperglycemia may have an