

Letter to the Editor

Paracetamol-induced ductal closure in a 5-month-old infant

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To the Editor,

Recently, we cared for a 5-month-old baby boy born at 28 weeks gestation with a 1.9-mm patent ductus arteriosus (Fig 1). The parents were counselled regarding the plan for percutaneous device closure and asked to return 2 weeks later. Surprisingly, on repeat echocardiogram, the ductus arteriosus had closed.

As spontaneous ductal closure is unusual past the newborn period, we questioned the parents about the events in the preceding 2 weeks. The parents reported administering paracetamol 12 mg/kg/dose twice daily for 4 days because of fussiness and nasal congestion. In premature infants during the newborn period, indomethacin or ibuprofen are first-line agents utilised for ductal closure. In patients with contraindications to non-steroidal anti-inflammatory drugs, paracetamol at 15 mg/kg/dose every 6 hours for 48 hours has been used effectively as a second-line agent.^{1,2} Previous authors have suggested that paracetamol works by acting at the peroxidase segment of prostaglandin synthetase and inhibits activity.³

To the best of our knowledge, our case is the first reported case of ductal closure associated with paracetamol outside of the newborn period. Further studies are needed to elucidate the role of paracetamol for ductal closure beyond the neonatal period.

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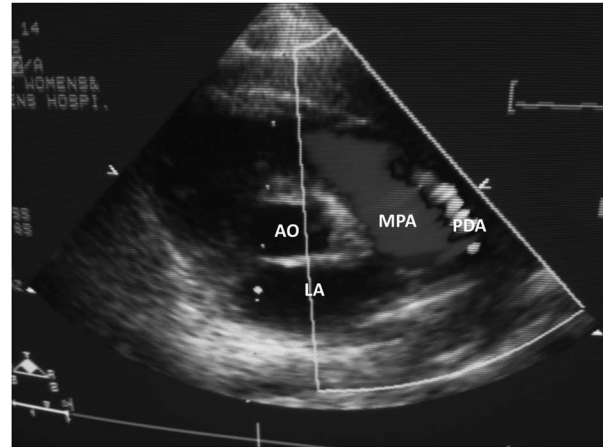


Figure 1. *Transthoracic echocardiogram (parasternal short-axis view) at 51 weeks gestational age showing a patent ductus arteriosus and mildly dilated LA and left ventricle. AO = aorta; MPA = main pulmonary artery; LA = left atrium.*

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Conflicts of Interest

None.

Ethical Standards

The manuscript is original and has not been accepted or published elsewhere.

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