

Amplatzer Duct Occluder for treatment of displaced PDA coil induced late haemolysis

A 4-year-old child who underwent patent ductus arteriosus (PDA) coil closure for 3 mm PDA (figure 1A) with 052" cook detachable coil, presented with the features of severe haemolytic anemia 4 months after PDA coil closure. Control angiography performed immediately after the coil deployment and control echocardiography performed 24 h after the procedure showed no residual shunt. A routine follow-up after 3 weeks postprocedure also revealed no residual shunt. No further follow-up was made. The cause for haemolytic anaemia was evaluated in detail and confirmed as residual PDA shunt, likely caused by the displacement of the coil from its initial deployed site. The removal of the already deployed coil was not advised, anticipating vascular damage and possible embolisation. An attempt to close the residual shunt by inserting two intertwined 038" coils was performed but failed (figure 1B). Later, the residual PDA was successfully closed with 8/6 Amplatzer Duct Occluder with the waist of the device kept inside the already deployed 052" coil (figure 1C, D). Coils are used for occluding residual flow after device implantation. Large residual shunts with haemolysis require the deployment of multiple coils, devices or surgery.¹ Late haemolysis 4 months after coil closure is rare and device closure through an already deployed coil is not reported in the literature.

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Contributors SM, the corresponding author have involved in 100% in diagnosing, treating the patient. He has made substantial contributions to the conception or design of the case report, or the acquisition, analysis or interpretation of data.

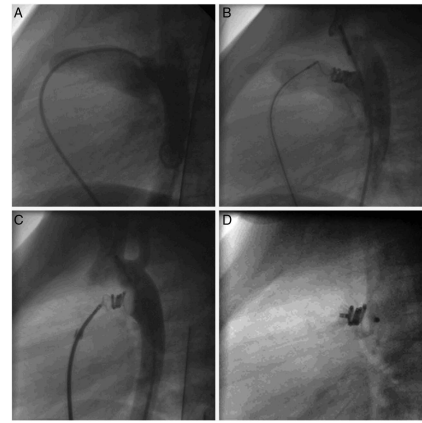


Figure 1 (A) Initial aortogram showing 3 mm PDA left to right shunt. (B) Aortogram showing significant residual shunt even after inserting two intertwined 038" coils. Already deployed coil size is 052". (C) Aortogram showing 8/6 Amplatzer Duct Occluder through the already deployed 052" coil with no residual shunting across PDA. The device still attached to the delivery system. (D) The fluoroscopic image of the amplatzer device and coil.

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