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Giant pulmonary artery aneurysm in a 6-year-old child



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ABSTRACT

A 6-year-old female child was admitted with complaints of progressive dyspnea on exertion since last 3 years. She was saturating 100% on room air with stable vitals. On clinical examination, left precordial bulge was seen with prominent epigastric pulsations. Chest X-ray showed rightward shift of mediastinum and huge homogenous opacity occupying almost entire left lung field. On two-dimensional echocardiography, a large aneurysmal mass was seen occupying left hemithorax which was suspected to be arising from pulmonary artery but its exact site of origin could not be determined. A small patent ductus arteriosus (PDA) was also seen. PDA could be seen directly supplying the aneurysm (Fig. 1). CT angiography was done to confirm the diagnosis. It showed a huge aneurysmal sac measuring 12 cm × 8.9 cm × 14 cm, arising from left pulmonary artery (LPA) opposite to the site of insertion of PDA. Sac was occupying most of the left lung and pushing down the left diaphragm (Fig. 2). Cause of formation of such a huge aneurysm could not be found out. Surgery was performed and mouth of the sac was closed along with ligation of duct, repair of LPA and drainage of the sac. After surgery, lung expansion was good. Patient was discharged and she is doing well.

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1. Case report

A 6-year-old female child was admitted with complaints of progressive dyspnea on exertion since last 3 years. She was saturating 100% on room air with stable vitals. On clinical examination, left precordial bulge was seen with prominent epigastric pulsations. Chest X-ray showed rightward shift of mediastinum and huge homogenous opacity occupying

almost entire left lung field. On two-dimensional echocardiography, a large aneurysmal mass was seen occupying left hemithorax which was suspected to be arising from pulmonary artery but its exact site of origin could not be determined. A small patent ductus arteriosus (PDA) was also seen. PDA could be seen directly supplying the aneurysm (Fig. 1). CT angiography was done to confirm the diagnosis. It showed a huge aneurysmal sac measuring 12 cm × 8.9 cm × 14 cm, arising from left pulmonary artery (LPA) opposite to the site of

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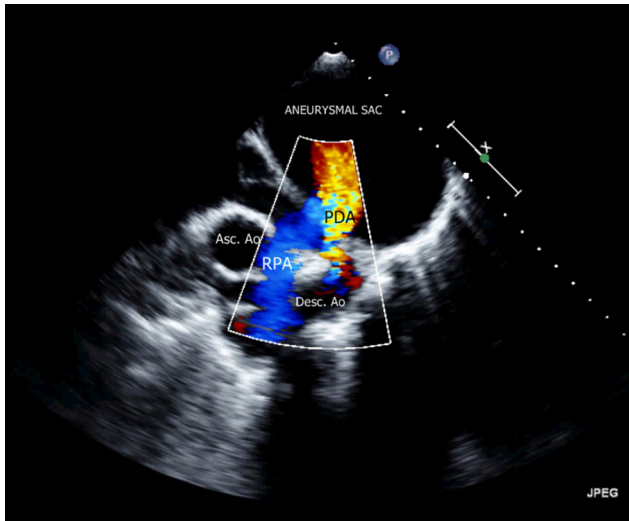


Fig. 1 – Parasternal short axis view in 2D echocardiography with color Doppler showing huge aneurysm of LPA (left pulmonary artery) supplied by PDA. Asc. Ao – Ascending Aorta, Desc. Ao – Descending Aorta, PDA – Patent Ductus Arteriosus, RPA – Right Pulmonary Artery.

insertion of PDA. Sac was occupying most of the left lung and pushing down the left diaphragm (Fig. 2). Cause of formation of such a huge aneurysm could not be found out. Surgery was performed and mouth of the sac was closed along with ligation of duct, repair of LPA and drainage of the sac. After surgery, lung expansion was good. Patient was discharged and she is doing well.

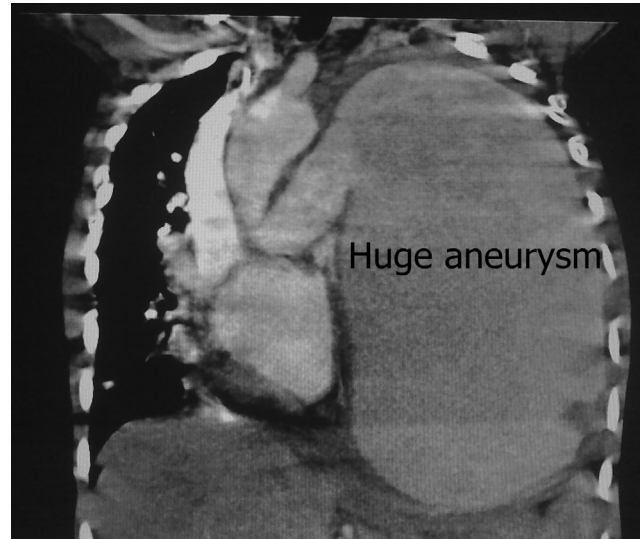


Fig. 2 – CT angiogram showing huge pulmonary artery aneurysm pushing down the left diaphragm and mediastinal shift to right side. We can see the amount of lung volume with which patient was surviving till now.

Contributorship statement

All the authors contributed in the thinking of manuscript, manuscript writing and image formatting for presentation in the journal.

Conflicts of interests

All authors have none to declare.