Neonate: Absence of femoral pulses is not always Coarctation of Aorta

Introduction

Thrombotic disease is an uncommon entity in the newborns but can significantly contribute to morbidity and mortality. New avenues of research may help to achieve new treatment modalities of treatment.

Case report

A newborn term, baby girl, delivered by LSCS with B.Wt of 3300g and normal APGAR score was found to have cyanosed lower limbs at the sixth hour of life. On examination, her femoral pulses were not felt and had a saturation of 60% on air bilaterally. Her hematological investigations revealed no abnormality apart from low platelet count (101000/L). Her bleeding and clotting profiles were also normal. Hence, an urgent 2D echocardiography was arranged in view of coarctation of aorta but revealed only a small ostium secundum with no patent ductus arteriosus. Then a Doppler flow study revealed an extensive, acute thrombosis below the renal artery at the level of abdominal aorta with minimal distal reformation of flow via left external Iliac artery.

At the twentieth hour of life she was administered antithrombolytic agent, reverse tissue plasminogen activator (rTPA) with intravenous heparin for three days followed by intravenous heparin alone for two weeks and subcutaneous enoxaparin to be followed for six weeks. A repeat Doppler flow study on the day three of life revealed normal flow on both lower limbs with no residual thrombosis.

Parental screening for possible abnormal anticoagulant revealed reduced protein S level in the mother with total protein S -50%. (Ref range 60-150%, free protein S 45%. Ref range 50-130).

Child recovered without any complication.

Conclusion

Administering antithrombolytic agents at the earliest would save life with minimal or no complication.