SUCCESSFUL MANAGEMENT OF PULMONARY ARTERY PSUEDOANEURYSM IN A CHILD WITH BETA-THALASSEMIA MAJOR

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Background and Aims

Pulmonary artery psuedoaneurysms (PAPs) are rare in children. However, they might be associated with devastating fatal outcomes.

We aim to describe the clinical presentation, course, management and outcome of a child who developed PAP.

Methods

Case report and review of literature.

We report a 14 year-old male patient with beta-thalassemia major on regular transfusion and deferiprone who presented with a 3-day history of fever, cough and respiratory distress. His plain x-ray chest revealed a right lower lobe consolidation and his blood picture showed a total white cell count of $0.6 \times 10^9/L$ and absolute neutrophil count of $0.0 \times 10^9/L$. A diagnosis of deferiprone-induced agranulocytosis and lobar pneumonia was made. The patient received Granulocyte colony stimulating factor (G-CSF) and broad spectrum antibiotics (meropenem/amikacin) plus amphotericin B and He improved after 7 days of treatment. Three days later, he developed massive hemoptysis and required pediatric intensive care admission, resuscitation and mechanical ventilation. Bronchoscopy revealed profuse bleeding from the right main bronchus. Chest CT angiography revealed 2 pseudoaneurysms arising from the lower lobe branch of right pulmonary artery.

Results

As an urgent management strategy, selective right pulmonary catheterization was done and coil embolization of both pseudoaneurysms was undertaken successfully by interventional radiology team. The patient improved dramatically after the procedure and started on voriconazole therapy for six weeks as his aspergillus galactomannan antigen came to be positive.

Conclusion

High index of suspicion, proper teamwork and timely intervention are needed in emergency situations. Appropriate imaging modalities should be individualized for each patient based on clinical presentation.