Management of unusual chest problems

There are a variety of opportunistic lung infections that can occur in long-term immunosuppressed patients that may need special consideration in an haematology/oncology child with respiratory symptoms. Clinicians must have a low threshold for discussing cases with the Paediatric infectious diseases (ID) team. All doses must be check in the latest version of the CBNF.

**Mycoplasma pneumoniae**

This may present with a wide multitude of symptoms. The disease tends to present with a prodrome (fevers, chills, headaches) and the cough may persist for several weeks. A CXR may show diffuse patchy consolidation. Treatment is with IV Clarithromycin (doses as in CBNF).

**Pneumocystis carinii**

Signs of infection include tachypnoea, dry cough, dyspnoea on exertion and cyanosis. Chest is often clear on auscultation. Check blood gases or pulse oximetry as desaturation often proceed x-ray changes. A CXR may mimic many conditions but often shows bilateral infiltrates. Treatment is with high dose Cotrimoxazol for 14 days. Oral route is preferred unless nausea is severe (doses as in CBNF). In severely ill patients high dose steroids may also be required. Consult ID team.

**Fungal infections**

May result in more focal or patchy changes on x-ray. Cavitation and fungal balls may be present in aspergillus. Changes may be very minimal in the neutropenic phase. CT scan will usually show much more extensive disease. Treatment is with broad spectrum antifungal agents (see fungal policy).

**CMV infection**

In immunocompromised children pneumonia is the most serious presentation; hepatitis, encephalitis and retinitis may occur but are much less common. All haematology/oncology patients have CMV antibody status recorded at presentation and the risk to CMV positive children is minimal although reactivation has been known to occur. Acquired infection must be considered in any CMV negative child with a diffuse pneumonia. Treatment is with ganciclovir, or foscarnet in resistant cases (doses as in CBNF). Consider intravenous immunoglobulin.

**Measles infection**

Be aware of potential risk of this with reduced uptake of immunisations and reduced herd immunity. There is no specific treatment for Measles pneumonitis and all cases
of suspected measles pneumonitis must be discussed with the Paediatric ID team. Supportive care and Intravenous immunoglobulins (IVIG) are treatment of choice.

Investigations to consider:
1. Pulse oximetry and blood gas
2. Chest x – ray
3. CT chest

References:

Review

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