

CHEST X-RAY FOR KIDS WITH PNEUMONIA

A procedure at risk of being overused, as indicated by the Associazione Culturale Pediatri

Not all types of pneumonia are the same. The one that our children catch at school or from family members, of mild to moderate severity, does not result in complications. For this type of pneumonia, performing a chest x-ray on the child is unnecessary. Visits to the paediatrician and home treatment is all that is needed to heal the child. Hospitalisation is unnecessary. In fact, pneumonia that afflicts healthy children who are not predisposed to respiratory illnesses is caused by an acute lung infection and goes away without complications.

The not so easy task of the family paediatrician or emergency worker lies in quickly making a correct diagnosis of the type of lung infection underway, in order to immediately begin treatment. For this, however, an x-ray is not helpful as it doesn't provide information for the diagnosis, which instead depends on the child's age, severity of the symptoms and nature of the infection. Sometimes the paediatrician orders a chest x-ray to confirm that there is pneumonia, or because he/she hopes to understand whether it is viral or bacterial. This is information that the x-ray does not provide. There is also a bad habit of prescribing routine chest x-rays to all children who have recovered from an uncomplicated pneumonia. The aim of this is to certify the

progression of the pneumonia. However, if it is clear that the child has recovered, an x-ray is not needed.

LET'S UNDERSTAND WHY

X-rays are harmful, especially for children. Careful consideration is necessary before unfairly exposing them to the risk of adverse effects from radiation, which accumulate each time an x-ray is performed. And the damage may be serious. The most recent international guidelines show that, in cases



where it is clear to the paediatrician that the child has pneumonia, performing an x-ray doesn't add any useful information. To understand what the best treatment is, it's necessary to understand whether the pneumonia is viral or bacterial but, at present, a chest x-ray doesn't help distinguish the origin of the pneumonia with certainty. Furthermore, mixed pneumonias of viral and bacterial origin are frequent in children.

Typical signs of pneumonia are:

- fever of over 37.5 C degrees;
- acute respiratory symptoms (increased frequency of breath, difficulty breathing, cough, chest pain and gasping);
- general clinical picture (fatigue);
- radiological or clinical signs of lung infiltration.

WHEN IT IS ADVISABLE

Chest x-rays may be very useful when children have contracted pneumonia in the hospital, if the child is less than two months old, or if he/she suffers from other chronic diseases related to pneumonia.

The chest x-ray remains therefore, to this day, a key instrument in evaluating lung diseases. Interpreting x-rays of small children, however, is very difficult.

To learn more: "Polmonite, curarsi fuori dai luoghi comuni", Salutes 70, October 2007 (in Italian), available on www.altroconsumo.it
Project "Doing more does not mean doing better - Choosing Wisely Italy"
www.slowmedicine.it
www.choosingwiselyitaly.org

IF YOU SUSPECT PNEUMONIA: ADVICE FROM ALTROCONSUMO



➤ Gain a good understanding, by thoroughly discussing with the paediatrician, whether the laboratory tests and diagnostic procedures are absolutely necessary in deciding treatment.

➤ If the paediatrician suspects seasonal pneumonia, manageable in the doctor's office, it is not necessary to have laboratory tests or x-rays.

➤ Keep in mind that the child's age is very important as it helps to understand the possible origin of the pneumonia and, therefore, how to orient treatment. A viral infection, indeed, is more frequent in the first two years of life. Afterwards, it is more likely to be a bacterial infection, probably streptococcus pneumoniae, followed by mycoplasma and chlamydia pneumoniae.

➤ Do not routinely take chest exams to check whether the child is recovering from pneumonia or to check whether he/she has healed over time.