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INORGANIC FOREIGN BODIES IN THE RESPIRATORY TRACT

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Inorganic foreign bodies are not often found in the respiratory tract. Their diagnosis is not difficult having in mind that they are roentgen-positive. However, sometimes they may be not so easily recognized. They penetrate more deeply and remain undiagnosed and thus they may cause atelectasis, bronchopleural abscesses and bronchiectasia. Most inorganic foreign bodies (IFB) are more easily tolerable by the organism than the inorganic bodies but finally the reactive changes in the bronchi may lead to typical pyrogenic pulmonary processes which can be very dangerous for the patient.

Seventy seven FB were observed in the Clinic for the last five years (1986-1991), 12 of which were IFB (table 1).

Table 1

Nature of IFB	n
watch parts	3
metal end of a tube	1
plastic mozaic	2
pin	2
tooth prosthesis	2
tampons	1
other	1

Eleven IFB were found in boys and one in a girl. As it is seen from table 2 IFB predominate in childhood.

Table 2

Age (years)	0 - 1	1 - 5	5 - 7	7 - 14	over 14	total
number	1	4	5	1	1	12

Our data correlate with the results of other authors. Most bronchoscopies were performed in the emergency unit under general narcosis with halotan, myorelaxin and additional amount of oxygen.

Friedel bronchoscope was used. Febrility and caughing were the most common symptoms. In 8 of the cases, obstruction and weakened vesicular respiration was heard under the level of the FB. This was not observed after therapy. Most IFB were localized in the bronchi which is met more frequently compared to the localization of organic FB. As for the frequency of localization in different cardinal bronchi (left and right) the numbers were equal (6:6).

Right bronchus localization is characteristic for organic FB. As seen with X-ray examination 5 cases had altered cardiac shadow, elevation of the diaphragm and shortening of the intercostal distance. In the other cases the symptoms were not so significant. As for the time for hospitalization most patients have been in hospital in time (table 3).

Table 3

Time of hospitalization	up to 24 h	3 days	20 days	30 days	total
number of cases	6	3	1	2	12

Three patients with IFB who were later on hospitalized showed clinical signs of a chronic alien body with intermittent pneumonias. At times of remission they had caughing, chest-pains, subfebrility, etc.

Extraction of IFB is quite a difficult problem. No schematic attitude can be recommended and the solving the problem is individual. No irreversible changes have developed after IFB in the bronchi. However, ulcerations, granulation tissue and oedema was oftem met. Patients were under survey after extraction of IFB in the emergency ward and in the Pediatric Clinic. All patients were clinically healthy after treatment.

Conclusions:The freguency of IFB is inversely proportional to age. IFB occur most often in children under 5 years. It is more frequent in boys. Organic FB are less frequent in lower respiratory tract.

Detailed anamnesis, pulmonary status and X-ray examination are very important for the early diagnosis of FB .