

METHOD OF TOPICAL DIAGNOSIS OF BRONCHOPLEURAL COMMUNICATIONS IN CHILDREN WITH HEAVY ACUTE PURULENT-DESTRUCTIVE PULMONAL DISEASES

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The method of topical diagnosis (MTD) of bronchopleural communications in patients with acute purulent-destructive pulmonary diseases was first invented and applied by Rafinski (1968). The localization of the communication was determined by the foam-secretion coming out of the conductive bronchi. Its hermetization was provided by a little synthetic sponge tied to a thread which is pulled out through the vocal fissures (4).

Geraskin, V. I. (1974, 1978) improved MTD suggesting the so-called «search-obturation»; by a preliminary applied pleural drainage and combined obturation of lobar bronchia indicating no air out of the drainage, the author determines the precise location of any bronchopleural communication. Similar synthetic sponge is used to provide hermetic conditions in the bronchi (1, 2).

Though both MTD show certain advantages, their application is quite traumatic and difficult to realize. Those inadequacies of the technique are the reason that we propose our own method in the practice (rationalization No. 11807/18th April, 1979).

The method itself is the following: instead of the synthetic sponge we apply Fogart catheter. A bronchoscopy is performed and orientation-diagnosis of bronchial communication is done. The necessary number Fogart catheter is calibrated in advance; by a syringe the top balloon is puffed up to a size which corresponds to the suggested bronchial calibre, thus obturating it. After reaching and canuling the respective bronchi we apply the same air amount to blow the balloon.

The searching order of communication places can be seen on fig. No. No. 1—10. Canule insertion in all secondary bronchia is not difficult when there is a satisfying bronchoscopy. The difficulty in putting a canule in the upper-lobe bronchi can be overcome by using the method of Tchistihin, V. S. (1973).

The method itself is applied after placing of a pleural drainage (3). By bronchial obturating in the region of the communication it can be immediately established: no air comes out of the drainage when a Fogart catheter is blown.

Most often location of any bronchopleural communication is in a single lobe only. The multiple communications including 2—3 lobes are quite rare, which causes additional problems in their determination and location. However, by applying our method and 2 Fogart catheters simultaneously, we diagnose precisely the communications regardless of their number and location.

The advantages of our method are the following: no trauma, shorter time of proceeding, insured sterility, constant visual control, lighter technical performance.

100 patients with acute purulent-destructive pulmonary diseases were recently admitted to the Clinic of Child-Surgery, Higher Institute of Medicine, Varna city. Our MTD was applied to 2 of the patients. In both cases we provided a precise topical diagnosis which was confirmed in the followed course of examination and treatment.

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**МЕТОДИКА ТОПИЧЕСКОЙ ДИАГНОСТИКИ БРОНХОПЛЕВРАЛЬНЫХ
КОММУНИКАЦИЙ ПРИ ТЯЖЕЛЫХ ОСТРЫХ ГНОЙНО-ДЕСТРУКТИВНЫХ
ЗАБОЛЕВАНИЯХ ЛЕГКОГО В ДЕТСКОМ ВОЗРАСТЕ**

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РЕЗЮМЕ

Существующие в настоящее время методы топической диагностики бронхоплевральных коммуникаций Рафинского Р. (1968) и Гераськина В. И. (1974, 1978), несмотря на их большую диагностическую ценность, отличаются значительной травматичностью и сложностью выполнения.

Авторы предложили и ввели в клиническую практику адаптированный метод топической диагностики (рационализация № 11 807/1979 г.), отличающийся своей атравматичностью, легкостью выполнения и рядом других преимуществ.