

Mirko Stanetić, Živka Eri: Valjanost sputuma u citološkoj dijagnostici karcinoma bronha. *Pneumon*, 1999; Vol. 37, No 1-4, 37-43.

Sputum je najčešće analiziran materijal kod bolesnika sa sumnjom na maligno oboljenje respiratornog trakta. Danas se upotrebljavaju i aspiracione tehnike za dobijanje materijala za citološku analizu. Ciljevi istraživanja su ispitivanje valjanosti citološke analize sputuma u dijagnostičkom kod karcinoma bronha, utvrđivanje prednosti i razlike između citološke analize sputuma i drugih materijala i ustanovljavanje ukupne pozitivnosti citološke analize. Ispitivana je grupa od 120 bolesnika liječenih i operisanih u Institutu za plućne bolesti u Sremskoj Kamenici i Klinici za plućne bolesti u Banja Luci. Sav citološki materijal je boje metodom May-Grunvald-Gimsa i analiziran na svjetlosnom mikroskopu. Rezultati citoloških analiza su upoređivani sa konačnom histološkom dijagnozom postavljenom na postoperativnom materijalu. Praćeni su podaci o polu, starosti, pušenju, dominirajućim tegobama, lokalizaciji promjene i operativnom zahvatu. Pozitivnost citološke analize sputuma iznosi 25%. Epidermoidni karcinom je dijagnostikovao u 24% slučajeva, adenokarcinom u 1%. Muškari su sačinjavali 85,8% grupe. Najveći broj ispitanika je bio u starosnoj grupi od 50-70 godina. Pušači su bili u 85,8% slučajeva. Dominirajuća tegoba u grupi kod bolesnika koji su imali pozitivnu citološku analizu sputuma je bio nadražajni kašalj, u 53,3%. U istom omjeru se javlja i u cjeloj ispitivanoj grupi. Patološki proces je kod pozitivnih ispitanika desno u 60%. Centralna lokalizacija u 70% slučajeva daje pozitivnu citološku analizu sputuma. Najčešće urađen tip operacije kod bolesnika koji su imali pozitivnu analizu sputuma je pneumonektomija 53,3%. Transtoraklanom iglenom punkcijom dobijeni materijal daje citološku potvrdu bolesti u 60% slučajeva. Veću pozitivnost ima materijal dobijen kateterom (86,7%). Ukupna pozitivnost citoloških analiza bez obzira na vrstu analiziranog materijala iznosi 50,8%. Citološka greška u smislu lažno pozitivnih nalaza se javlja u 1,7%. Desnostrane promjene, proširenje, uz dominirajuću tegobu kašalj, kod pušača daju veću pozitivnost citološke analize sputuma. Na ovaj način se potvrđuje u najvećem broju epidermoidni karcinom. Perkutana iglena punkcija ima prednost kod periferno lokalizovanih patoloških promjena, u ovom radu kod adenokarcinoma. Kateterom se obezbjeđuje kvalitetan materijal za citološku potvrdu bolesti. Visoka pozitivnost citoloških analiza obezbjeđuje trajno mjesto ovoj morfološkoj grani u dijagnostici karcinoma bronha, te cijeneći njene prednosti treba se šire koristiti.

Ključne riječi: citologija, sputum, karcinom bronha

Mirko Stanetić, Živka Eri: Evaluation of the cytological sputum analysis in the diagnosis of lung cancer. *Pneumon*, 1999; Vol. 37, No 1-4, 37-43.

Sputum is the most common material taken for a cytological analysis from patients suspected for a malignancy of the respiratory tract. Nowadays the material for a cytological analysis is obtained by aspiration techniques as well. To evaluate the cytological sputum analysis in the diagnostic procedure of lung

cancer, correlate it to the cytological analysis of other sampling materials and estimate the total positivity of the cytological analysis. The investigation included 120 patients of the examined group treated and operated at the Institute for Lung Diseases in Sremska Kamenica and the Pulmonary Clinic in Banja Luka. The obtained samples were stained by the May-Gruanwald-Giemsa method and analysed by a light microscope. The cytological findings were correlated to the final histologic diagnosis established by the postoperative sample analysis. The following criteria were considered: sex, age, smoking habits, dominant symptoms, localization of the lesion and type of surgery. The 25% positivity of the cytological sputum analysis was established. Epidermoid lung cancer was diagnosed in 24% and the adeno type in 1% of the patients. The males made 85.8% of the examined group. The majority of the patients belonged to the 50-70 years old age group. Smokers made 85.8% of the examined group. The irritating cough was a dominant symptom in the group of patients having a positive cytological finding, reported by 53.3% of them. The same ratio persisted throughout the examined group. Of the patients with a positive cytological sputum finding, 60% had the right localization of the pathological process, while a positive sputum finding was obtained from 70% of the patients with a central lung lesion. Pneumonectomy was the most common surgery type performed in 53.3% of the patients with a positive cytological sputum finding. The cytological confirmation of the disease was obtained by a transthoracic needle aspiration in 60% of the patients. The catheter obtained material had a higher positivity (86.7%). The total positivity of the cytological analyses, regardless the type of the sample submitted, was estimated to be 50.8%. A cytologic error, appearing as a false-positive finding, occurred in 1.7% of the cases. A higher positivity of the cytological sputum analyses was obtained from the smokers with larger right-sided lesions who had cough for a dominant symptom. The diagnosis of the epidermoid lung cancer was thus confirmed in the majority of these patients. The percutaneous fine-needle aspiration was favoured in the patients with peripherally localized lung lesions, established in our study as adenocarcinomas. The catheter sampling provided the top-quality material for a cytological confirmation of the disease. Due to the established high positivity of the cytological sputum analyses, the method is evaluated as a reliable one to be included and more widely applied in the diagnostic procedure of lung cancer.

Key words: cytology, sputum, lung cancer