

important knowledge of regional peculiarities of the chemical composition of kidney stones, to select the correct therapeutic strategy. The impact of the disease can be reduced by administering a prophylactic treatment of patients with recurrent urolithiasis. For now, there is no information about the characteristics of the chemical composition of urinary calculi in the Republic of Moldova. Aim of the study: Calculi chemical composition research in patients with recurrent urolithiasis in the Republic of Moldova.

Material and methods: Prevalence descriptive study. 160 kidney calculi were analyzed using chemically modified method by Hodgkinson and infrared Spectroscopy with Fourier transformant.

Results: Phosphate stones have been identified in 33 (20.9%) cases: calcium phosphate - 15 (9.37%), struvites - 17 (10.62%), brushitis - 1 (0.62%) cases. Calcium oxalate calculi (n=61, 42.49%): whewellites - 39 (24.37%); weddelites - 22 (13.75%) were determined, being followed in frequency of uric acid-42(26.25%). In 24 (15%) cases calculi of mixed composition: whewellites + apatite carbonate - 6 (3.75%), whitlockites + protein - 6 (3.75%), whitlockites + weddelites 2 (1.25%), whewellites + uric acid - 6 (3.75%) cases were detected. Other calculi types were rarely found (2,5%).

Conclusions: Kidney calculi from calcium oxalate, uric acid and calcium oxalate and uric acid mixed calculi are the most frequently found in Moldova. Relatively high incidence of infected calculi (27.4%) justifies the necessity of appropriate antibacterial therapy in the pre- and postoperative period. Addressing a healthy lifestyle and instructing patients using this information a substantially improve the results of primary and preventive measures to prevent recurrence of urolithiasis. The information obtained about chemical composition of kidney stones, identifying specific risk factors for Moldova would benefit and healthcare professionals in planning preventive measures to reduce the high incidence of this disease.

Keywords: chemical composition, recurrent urolithiasis, infrared Spectroscopy.

200. IMPORTANCE OF THERMOMETRY IN MONITORING OF THE FLAPS

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Introduction: Complications highlighted in the postoperative period remains to be one of the current problems of reconstructive surgery, which has a relatively increased incidence (5-17%). Aim: evaluation of diagnostic value of local thermometry of flaps for early detection of complications.

Material and methods: The study group was 36 patients treated in the period 2014-2015 within the IEM, women - 10 (27.8%), men - 26 (72.2%). The limits of age were 16-70 years, with mean age 44.7 years. The thermometry was performed with an electronic thermometer with an accuracy of 0.1 0C and the data were recorded in the form of thermal curves. The temperature of the receiving areas were considered baseline values that were compared to the thermometric values of the flaps. Duration of monitoring was from 1 postoperative day to 1 year, at 2-3 months range. Data were statistically analyzed using the "step by step regression" with truthful coefficients.

Results: In the study group were 30(83.3%) island flaps, free – 6 (16.7%) cases. Thermometric differences in the postoperative period ZR/ZD >20C were found in 6 (16.7%) cases: island flaps – 4 (13.3%) cases, free – 2 (33.3%) cases. If the island complications occurred in 8(26.7%) cases, free – two (33.3%) cases. Free flap complications: venous insufficiency due to anastomosis's thrombosis (n=1), marginal necrosis (n=1) and insufficiency of anastomosis due to adjacent tissue's edema (n=1). Complications of island flaps were: marginal necrosis (n=4), vascular insufficiency due to edema (n=3) and loss of the flap (n=1).

Conclusions: In the early postoperative period thermometric difference >20C indicates a flap's vascular suffering that requires urgent actions. In the case of island flaps the thermometry has a sensitivity of approximately 85%, while in the case of free - 95%, the specificity is 98% in both.

Keywords: thermometry, complications, flap, monitoring

201. IMPLEMENTATION OF FRAMELESS STEREOTACTIC BRAIN BIOPSY: A PRELIMINARY EXPERIENCE

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Introduction: Frameless stereotactic neuronavigation has proven to be a feasible technology to acquire brain biopsies with good accuracy and little morbidity and mortality.

Materials and methods: The present study reports our experience with intracranial biopsy procedures performed using BrainLAB® Varioguide frameless stereotactic brain biopsy systems. From March 2015 to February 2016, five patients aged from 37 to 54 years with supratentorial brain tumors underwent frameless stereotactic brain biopsy. The inclusion criteria for frameless stereotactic brain biopsy were: tumors localized in the eloquent brain area, deep-seated lesion or poor general condition with high risk for open surgery. All biopsies were performed using the frameless stereotaxy protocol under general anesthesia and head fixation in a three-point Mayfield clamp.

Results: In all patients, VarioGuide and multimodal neuronavigation were successfully integrated into the biopsy procedure. No VarioGuide-related adverse events were reported. The mean operative duration was 105 min. The overall diagnostic yield was 100 %. A discrepancy between smear results and conclusive diagnosis was detected in one case. The major reasons for the discrepancy were necrosis and improper quality of the preparations. Following each operation, a control headCT was routinely performed to confirm and document the proper targeting and to exclude postoperative intraparenchymal bleeding. Three cases of bleeding within the lesion or along the biopsy trajectory were observed on postoperative CT scans but were Associated with transitory headaches. No mortality and morbidity occurred postoperatively.

Conclusion: The frameless stereotactic biopsy with neuronavigation systems is an effective, safe and important technique for histological diagnosis of brain lesions, particularly for multifocal and corpus callosum lesions.