



Analysis of current indications to bilateral adrenalectomy



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Introduction. Bilateral adrenalectomy [BA] is rarely applied as a therapeutic procedure. It serves as a life-saving treatment in chosen patients with persistent Cushing's disease after an ineffective pituitary surgery or in patients with ectopic ACTH production. Other indications for BA are: bilateral adrenocortical adenomas, congenital adrenal hyperplasia and bilateral pheochromocytoma in patients with hereditary paraganglioma-pheochromocytoma [PPS/PGL] syndromes. It is also a procedure of the first choice in bilateral metastatic adrenal neoplasms.

The aim of the study was to determine the indications to BA in patients hospitalized in our ward between 2001-2012.

Material and methods. 12 patients [7F; 5M] aged 19-72 years. Studies were based on retrospective evaluation and analysis of medical records.

Group 1 covered 7 patients [4F; 3M] with bilateral pheochromocytoma [in the course of MEN2 syndrome - 4 patients, PPS/PGL- one patient and von Hippel Lindau - one patient and one woman with sporadic form of bilateral pheochromocytoma].

Tab.1 Patients with bilateral pheochromocytomas

n.	patient	gender	age	diagnosis
1.	KM	male	32	PPS/PGL syndrome
2.	KM	male	19	Von Hippel-Lindau syndrome
3.	KE	female	29	MEN 2 A
4.	PM	female	26	MEN 2A
5.	PZ	male	24	MEN 2A
6.	PW	male	54	MEN 2A
7.	Ł.Z.	female	54	Bilateral pheochromocytoma

In group 2 the indications to BA were adrenal metastases of renal clear cell carcinoma in two cases and a metastasis to one adrenal gland coexisting with adenoma of the other adrenal gland in one case.

Tab.2 Patients with bilateral adrenal metastases

n.	patient	gender	age	diagnosis
1.	JB	female	64	Carcinoma claro-cellulare
2.	WL	male	72	Kidney cancer
3.	MK	Male	45	Carcinoma claro-cellulare

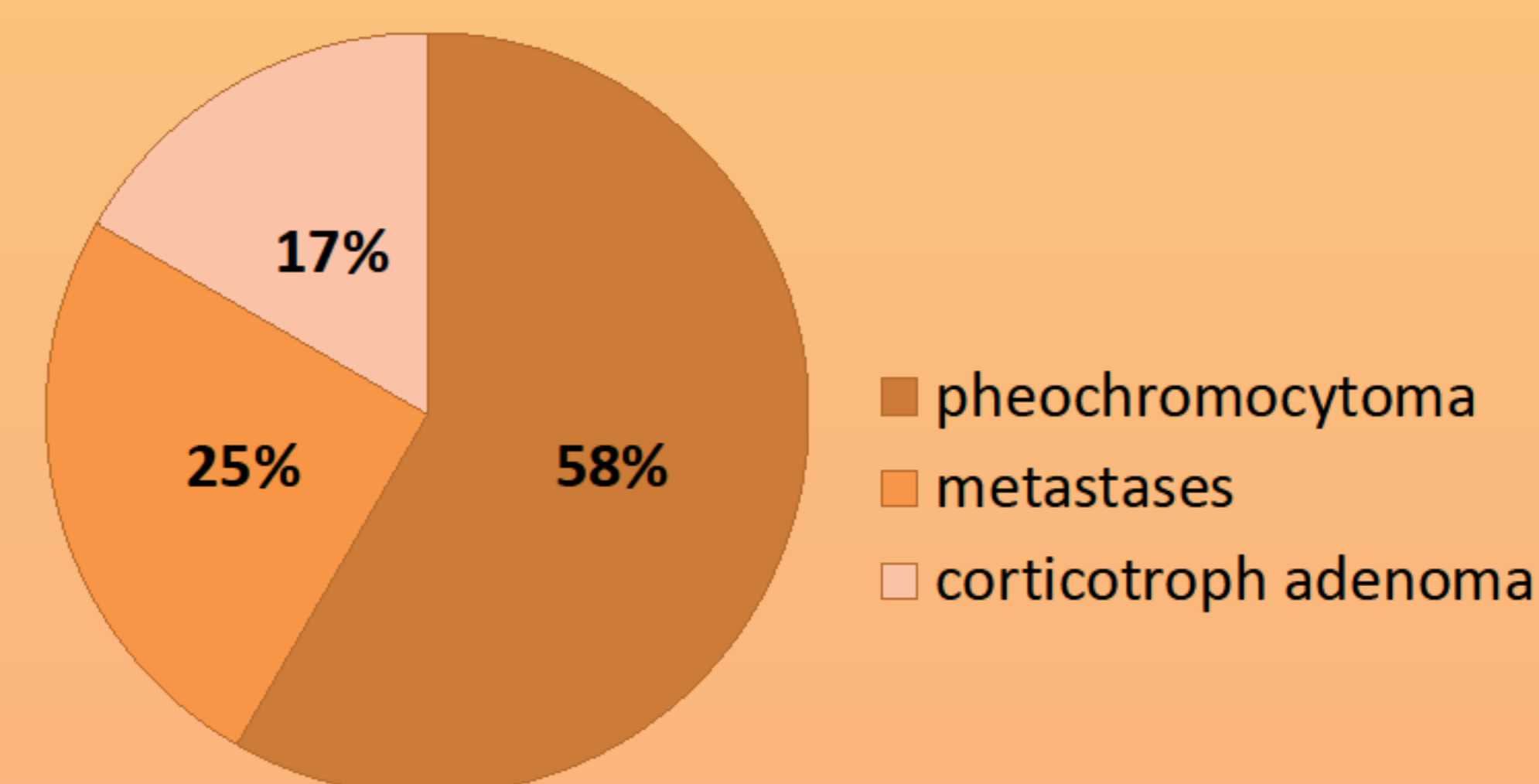
Conclusions. Currently, the prevalent indication to BA is bilateral pheochromocytoma, mostly in the course of underlying hereditary neoplastic syndrome.

Group 3 covered 2 women with Cushing's disease. One of them was operated 31 years earlier propter corticotroph microadenoma and the second – because of atypical pituitary macroadenoma refractory to radiation, neurosurgical and pharmacological treatment.

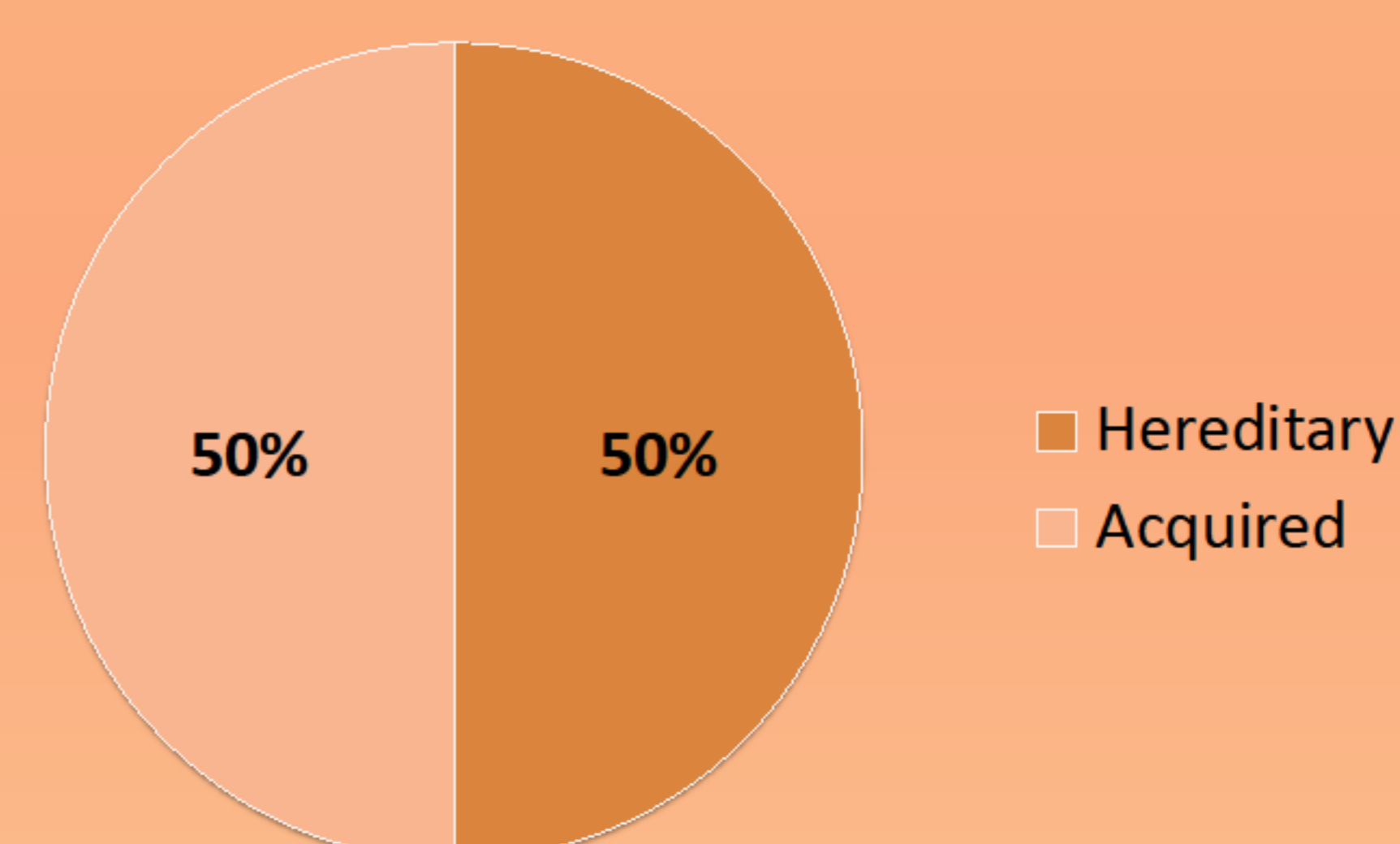
Tab.3 Patients with corticotroph adenoma (Cushing's disease)

n.	patient	gender	age	diagnosis
1.	FU	female	53	Corticotroph microadenoma
2.	MB	female	58	Corticotroph macroadenoma

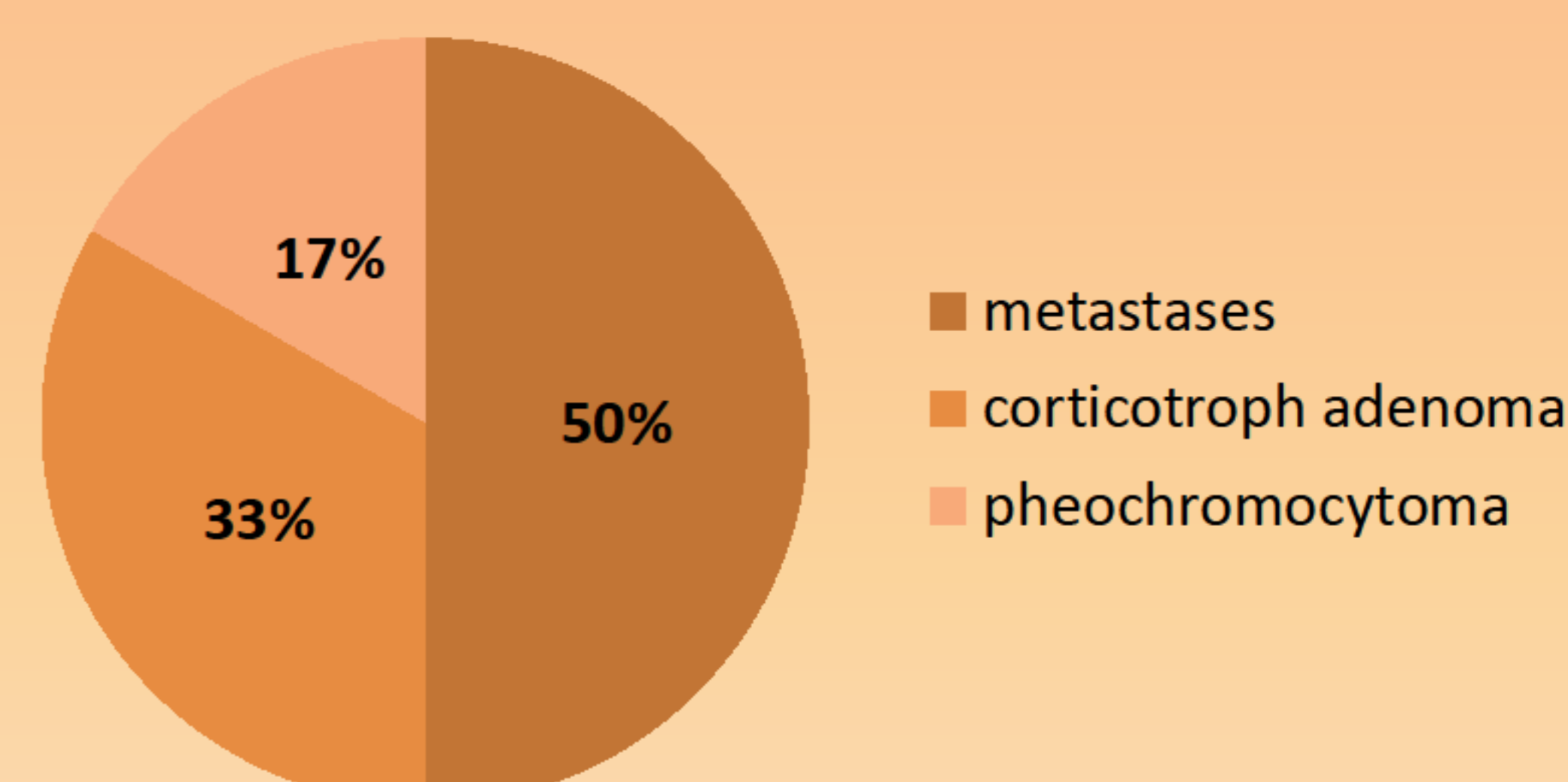
Ryc.1 Frequency of particular indications to BA in studied group of patients



Ryc.2 Frequency of hereditary and acquired disorders as indications to BA



Ryc.3 Prevalence of particular acquired causes of BA



Patients with congenital disorders, Cushing's disease and one with metastasis and adenoma, underwent synchronous bilateral or two-stage adrenal surgery. Female with sporadic bilateral pheochromocytoma was operated twice at interval of 10 years and 2 patients with adrenal metastases at intervals of 3-4 years. Two patients [M with renal carcinoma and F with atypical pituitary adenoma] died respectively after one and 3 years due to the progression of the underlying disease. The remaining patients are still alive [from 2 to 31 years after a surgery].