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#### Summary

Laxative effect of lactulose was reported for the first time in 1959, soon after its usage for baby-food. This synthetic disaccharide has been used for treatment of hepatic encephalopathy since 1966. Due to the absence of any enzyme capable of metabolizing lactulose in the human small bowel, it reaches the colon unchanged, where bacterial fermentation occurs, causing decrease of luminal pH and consequent neutralization of ammonium, enhancement of propulsive peristaltic waves and osmotic effects and proteolytic bacterial suppression. Effects of lactulose on the bowel were used in the treatment of salmonella carrier-state, intestinal and vaginal mycosis, and urinary tract infections in elderly patients. Colonic acidification inhibits activity of bacterial 7 $\alpha$ -dehydroxylase with consequent decrease of secondary bile acids formation in the bowel, which is important in prevention of colorectal carcinoma, in hypercholesterolaemia, and in lowering of bile lithogenicity. Beneficial effect in chronic renal failure is achieved by extra-renal nitrogen excretion. There wasn't any evidence in the literature on carcinogenicity and teratogenicity of lactulose. Nausea and gaseousness are side effects, and diarrhea is an overdose response. Daily dose of lactulose is adjusted to the desirable number of stools. Lactulose can be long-term used in elderly without toxicity, as well as in diabetic patients, pregnant female, children and postoperatively. Due to all these beneficial effects lactulose is the world's most prescribed laxative, and an essential medication in hepatic encephalopathy.

Key words: lactulose, laxative, hepatic encephalopathy, functional constipation

## SYNDROMA CUSHING I HIPERTENZIJA

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### ABSTRAKT

Cushing-ov sindrom je kliničko stanje nastalo zbog dugotrajne ekspozicije prekomernoj sekreciji kortizola, a karakterizira se gubitkom normalnog feedback mehanizma osovine hipotalamus-hipofiza-nadbubreg, kao i gubitkom normalnog cirkadijalnog ritma sekrecije kortizola. Pacijent, 31 godina, upućen je u Institut u cilju ispitivanja, a pod sumnjom na hiperkorticizam. Poslednjih 6 meseci primjećuje tamniju prebojenost kože, nagli porast u telesnoj težini i slabost mišića potkolenica. Na prijemu tipičan kućingoidni habitus, pletora lica, centripetalna gojaznost uz redukciju glutealne muskulature, hipotrofija ekstremiteta i lividne strije sa defektom potkožnog tkiva, uz hipertenziju u rasponu od 150/90 do 200/110mmHg. Rutinske laboratorijske analize pokazale su hiperglikemiju i hipokalemiju uz značajnu kaliurezu. Nadjen je izostanak dnevnog ritma sekrecije kortizola; izostanak supresije kortizola u niskodoznom i visokodoznom deksametazon supresionom testu; uzgranično povišen ACTH. Nivo 5-HIAA u urinu povišen. MR pregled abdomena i hipofizne regije pokazao je uredan nalaz. U CRF stimulacionom testu ne dolazi do značajnog odgovora kortizola,