

Morphological and morphometric characteristics of choroid plexus psammoma bodies during the human aging

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SUMMARY

Psammoma bodies are one of many choroid plexus aging changes which origin is still enigma for the scientists.

During our investigation psammoma bodies were studied on 30 postmortem brains by light microscopy. They stained red with HE, and were PAS and AB PAS positive. The largest number of lamellas were stained blue with Mallory's connective tissue stain, except peripheral and next to the center lamella which stained red. During the aging, psammoma bodies became larger and more irregular, which was followed with group area and perimeter, single psammoma body average area and average perimeter, average diameter and contour index increase. Psammoma bodies merged in the second and the third age group and merging process led to larger and more irregular structures formation.

The results of this investigation suggest that psammoma bodies are more frequent in choroid plexus of healthy older people and during the aging they obtain larger dimensions, more irregular contours, which is the result of their mutual merging.

INTRODUCTION

Human brain choroid plexus (CP) represents highly vascularized vilous structure, which function in the brain is very similar to that of the kidney in the human organism. It produces cerebrospinal fluid (CSF) and secretes many other molecules into the CSF. Beside secretory function, it reabsorbs several substances from CSF (Serot, 2001a). CP also, has the function in CSF-blood barrier formation and cerebral immune response regulation (Matyszak et al., 1992). Mainly, CP epithelial