The morphology of the outer and inner membranes of traumatic chronic subdural hematomas (CSDHs) surgically removed from eight patients was investigated by scanning electron microscopy (SEM). Hematomas were divided into three groups based on time that had passed from the initiation of trauma to surgery. Structure of the CSDHs showed gradual morphological changes of the developing hematoma capsule. They initially included angiogenic and aseptic inflammatory reactions followed by progressive involvement of fibroblasts—proliferating and producing collagen fibrils. Numerous capillaries suggesting formation of new blood vessels were observed mainly in young hematomas removed between 15 and 21 days after trauma. In “older” hematomas (40 days after trauma), more numerous capillaries and thin-walled sinusoids were accompanied by patent, larger diameter blood vessels. Within the fibrotic outer membrane of the “oldest” hematoma capsules (60 or more days after trauma), especially in the area over the hematoma cavity, blood vessels were frequently occluded by clots. The results suggest dynamic changes in cellular and vascular organization of traumatic CSDH capsules paralleling the progression in hematoma age [1)].

1)
https://www.cambridge.org/core/journals/microscopy-and-microanalysis/article/morphological-aspects-of-the-traumatic-chronic-subdural-hematoma-capsule-sem-studies/06A524F4F7A512F2D77735EEF50CE454