

**AGE-RELATED CHANGES IN THE ELASTIC FIBER NETWORK OF
THE HUMAN SPLENIC CAPSULE**

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ABSTRACT

The structural arrangement of elastic fibers in the splenic capsule from 16 human cadavers ranging in age from 1 month to 76 years was studied by histologic sections stained with selective methods for elastin. In infants the elastic fibers of the splenic capsule were homogeneously intermingled with collagen fibers, an arrangement that stabilizes the capsule during spleen growth and enlargement. With aging, collagen fibers predominate in the outer capsular surface over elastic fibers with the latter more evident in the deep lamina of the splenic capsule. In elderly individuals, the elastic fibers shorten, fragment, and thicken. The progressive decrease in the amount of elastic fibers in the splenic capsule with aging may restrict splenic distention and contribute to involution of the spleen as one grows older.