

Comparison of Ultrasound Echo Patterns from Livers of Different Species

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Ultrasonic pulse echo patterns obtained from livers of different degree of connective tissue density exhibit markedly contrasting characteristics. This is illustrated by comparing pictures of liver cross sections of pig and cat. In the pig, after weaning, connective-tissue structure develops to distinctly define the so called lobules. Ultrasonic visualization of structural features of the pig liver are demonstrated. In other adult mammals, including humans and cats, the connective-tissue structure is poorly developed. The echo patterns obtained show an absence of the echo density seen in pig liver. In this regard, the patterns resemble those reported by other investigators for healthy human liver. Comparison is made of the echo pattern for the adult pig liver and the patterns appearing in the literature for the cirrhotic human liver. The results reported here were obtained primarily on excised livers and the patterns were studied as a function of time after excision. The pattern for the exposed cat liver with normal blood supply intact was also obtained and compared to that of the excised liver.]Investigation supported partially by the National Cancer Institute, National Institutes of Health, Public Health Service, U. S. Department of Health, Education, and Welfare.] ©1966 *Acoustical Society of America*

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