Coexpression of FAS and FAS-ligand in chronic pancreatitis: correlation with apoptosis.

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Activation of the Fas receptor by Fas-ligand (FasL) results in apoptosis, and dysregulation of this pathway may contribute to abnormal cell proliferation and cell death. The aim of this study was to compare the expression of Fas and FasL in the normal pancreas and chronic pancreatitis (CP). By Northern blotting, Fas messenger RNA (mRNA) levels were increased in CP in comparison to the normal pancreas. Immunostaining revealed that faint Fas and FasL immunoreactivity was present in ductal and islet cells of the normal pancreas. In CP, there was faint Fas and strong FasL immunoreactivity in the proliferating ductal cells. Additionally, many of these ductal cells in the CP samples exhibited an apoptotic signal, as determined by DNA 3'-OH end labeling. These findings suggest that activation of apoptosis through the Fas receptor may contribute to the pathobiology of CP.

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