Mutagenic activity in stones from a patient with a congenital choledochal cyst

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Summary

A 12-year-old boy presenting a congenital choledochal cyst complicated with stones and chronic recurrent colangitis was subjected to surgery for cyst resection with a Roux-Y hepatojejunostomy. Potential carcinogenic factors were looked for in the cyststones using the *Salmonella typhimurium* plate test of Ames. High mutagenic activity was found in the stone extract incubated with the TA 98 tester strain, but not with the TA 100 strain. The test was negative with stone extracts obtained from seven patients operated on for chronic gallbladder disease. This study demonstrates the presence of a mutagenic chemical in the biliary tree of a patient with a clinical condition commonly associated with biliary tract cancer.