No association of primary adenocarcinomas of the small bowel with Epstein-Barr virus infection.

Abstract:
Epstein-Barr Virus (EBV) infection is considered to play an etiologic role in human malignancies, including a subset of gastric and cardiac cancers. Adenocarcinomas of the small bowel comprise a very rare entity, with little knowledge about molecular properties and etiological aspects. We have investigated the prevalence of EBER expression (EBV-encoded small RNAs) in a series of small bowel adenocarcinomas (n=56) utilizing RNA in situ hybridization (EBER-RISH). The patients had undergone primary surgical resection at either the Technical University of Munich or at the University of Graz. A surgical series of 82 primary resected gastric (n=36) or cardiac (n=46) adenocarcinomas (TU Munich) was used as control group. None of the 56 small bowel carcinomas exhibited EBER expression whereas in the control group the rate of EBER expression accounted for 4.4% in the group of cardia carcinomas and 8.6% in the group of gastric cancers. These results indicate that EBV infection plays no etiologic role in primary small bowel adenocarcinomas.