

CASE 014

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Colorectal Adenocarcinoma with Concomitant Mutations in *KRAS* and *NRAS* Genes.

CLINICAL HISTORY

A 54-year-old male patient presented with abdominal discomfort, and alternating diarrhoea and constipation. He was diagnosed with colorectal adenocarcinoma upon biopsy. The patient was prescribed FOLFOX-4 (C2), and referred to our laboratory for advanced *RAS* (RAS), and DNA mismatch repair (MMR) testing.

INVESTIGATIONS

We obtained 10 positively charged, unstained, non-baked slides (5-micron thick sections) of the FFPE fixed tumor tissue for MMR protein immunohistochemistry (IHC), and testing for *RAS* mutations.

MICROSCOPIC FINDINGS: Section shows a tumor. The tumor cells are arranged in acini and tubules, with focal solid areas and papillae formation. Individual tumor cells show moderate pleomorphism, vesicular nuclei, and prominent nucleoli. The features are of moderately differentiated adenocarcinoma.