We report on three cases of serrated polyps of the duodenum which were incidental endoscopic findings in three male patients with a median age of 70 years (range 63-84 years). Architecturally the histological findings in cases 1 and 2 were similar to hyperplastic polyps of the colon. In case 3 there was a low grade intraepithelial neoplasia which covered the whole polyp. This polyp relapsed after 2 years with similar histological findings. Immunohistochemically an increased proliferative activity was found in case 3 as well as associated overexpression of p16 (INK4a) and p53. No abnormal expression of MLH1 and β-catenin was found in any of the polyps. Molecular pathological analysis showed a BRAF mutation (V600E) in case 3. A wild type sequence in the KRAS gene was found in all polyps. In conclusion, serrated polyps should be included in the diagnostic spectrum of benign duodenal polyps.