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Autor(en) des Beitrags:
Klare, Peter; Haller, Bernhard; Wormbt, Sandra; Nötzel, Ellen; Hartmann, Dirk; Albert, Jörg; Hausmann, Johannes; Einwächter, Henrik; Weber, Andreas; Abdelhafez, Mohamed; Schmid, Roland M; von Delius, Stefan

Titel des Beitrags:
Narrow-band imaging vs. high definition white light for optical diagnosis of small colorectal polyps: a randomized multicenter trial.

Abstract:
The aim of the study was to compare the latest narrow-band imaging (NBI) device with high-definition white light (HDWL) endoscopy for accuracy of real-time optical diagnosis of small colorectal polyps. We conducted a randomized, prospective, multicenter trial at three study sites in Germany. In the NBI arm, endoscopists used NBI for the prediction of polyp pathology on the basis of the NBI International Colorectal Endoscopic classification. In the HDWL arm, NBI was not used for optical classification of polyp histology. The primary outcome was accuracy of optical diagnoses (neoplastic vs. non-neoplastic) in small polyps measuring < 10 mm. Secondary end points included sensitivity and negative predictive value (NPV). A total of 380 patients were randomized 1:1 to either the NBI or HDWL arm. A total of 421 polyps measuring < 10 mm were detected (55.8 % neoplastic, 44.2 % non-neoplastic). Accuracy, sensitivity, and NPV were 73.7 %, 82.4 %, and 75.5 %, respectively, in the NBI arm and 79.2 %, 79.8 %, and 73.4 %, respectively, in the HDWL arm (P = 0.225, P = 0.667, P = 0.765). More polyps were assessed with high confidence in the HDWL arm (82.6 %) than in the NBI arm (73.7 %; P = 0.038). The NPV of the prediction of
neoplastic histology in diminutive polyps (<= 5 mm) rated with high confidence was 90.3 % in the NBI arm. We detected significant differences between the participating study sites in the performance data of predictions. The levels of accuracy for real-time prediction of polyp histology (< 10 mm) did not differ between NBI and HDWL for optical diagnosis. Variation in the performance of optical diagnosis was apparent between study centers. ClinicalTrials.gov (NCT02009774).