VISUALIZATION OF DNA DAMAGE RESPONSE AND ITS ASSOCIATION WITH CLINICOPATHOLOGICAL FEATURES IN ULCERATIVE COLITIS

Masahiro Nakashima

UEG Week Copenhagen 2023 Poster

IBD

October 15, 2023

Immunofluorescence study of 53BP1 nuclear foci in ulcerative colitis shows DNA damage response correlates with disease activity, and co-localization with Ki67 may distinguish dysplasia from non-dysplastic tissue.

KEY POINTS

- Abnormal 53BP1 expression pattern was significantly increased in UC compared to controls (43.99% vs 10.80%, p=0.026) and positively correlated with c-reactive protein, Mayo endoscopic score, Mayo score, and histological severity.
- 53BP1 expression alone did not increase between UC and dysplasia, but co-localization of 53BP1 and Ki67 showed stepwise increase during progression from UC to dysplasia to colitic cancer.
- Significant difference in 53BP1 and Ki67 co-localization was observed between non-dysplastic epithelium versus dysplasia/cancer (p=0.0327), suggesting potential utility in distinguishing dysplasia.
- Study used immunofluorescence staining on 69 colorectal tissue specimens (18 controls, 51 UC) with abnormal pattern defined as 3 or more nuclear foci and/or foci larger than 1μm in diameter.
- Findings suggest DNA damage response associates with disease activity in UC and may inform surveillance strategies for dysplasia detection in this patient population.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/34913d94-743b-11ee-9655-0242ac140004

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.