

# The Association Between Acrochorda (skin tags), Metabolic Syndrome, and Adenomatous Polyps

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## BACKGROUND

Acrochorda (skin tags) are benign skin tumors that form primarily at skin creases, generally on the neck, armpit, and groin areas. There have been a small number of published studies in 1980s in patients who were found to have increased number of skin tags and colonic polyps, with a direct correlation described between the two. In addition, metabolic syndrome has been linked to adenomatous polyps, but a link between skin tags and metabolic syndrome has not been established.

## AIMS

- To determine if there is an association between adenomatous polyps and acrochorda.
- To determine if metabolic syndrome may pre-dispose to the development of acrochorda as well as polyps.

## REFERENCES

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## METHODS

- Patients at an academic referral center undergoing outpatient colonoscopy for screening or complaints of abdominal pain, constipation, and diarrhea.
- Patients with a history of previous colon polyps, known familial cancer syndromes, evidence of ongoing GI bleeding, history of colon resection >50%, or history of cosmetic removal of skin tags were excluded.
- Lipid panel, blood glucose, or hemoglobin A1C within 1 year of colonoscopy were recorded if available. Metabolic syndrome was defined by IDF 2006 criteria as two or more of the following: triglycerides > 150mg/dl; LDL cholesterol < 40mg/dl; SBP > 130 mmHg or DBP > 85 mmHg, or previous treatment; elevated fasting blood glucose or previous treatment.



## RESULTS

- A total of 75 patients met criteria for the study, 36 male and 39 female.
- During their endoscopic exam, 18 patients were found to have adenomatous polyps translating into 24% adenoma detection rate.
- In 35 patients with skin tags, 8 patients (22.8%) had adenomatous polyps. In 40 patients without skin tags, 9 (22.5%) had adenomatous polyps. There was no significant difference in adenoma detection rates between those that had skin tags and those that did not. ( $p = 0.20$ ).
- In addition, data for metabolic syndrome was collected. 53 (70.6%) of patients had all clinical parameters available for analysis. 20 (40%) of these patients met criteria for metabolic syndrome. 10 of those patients had adenomatous polyps, but only 3 patients had skin tags. Metabolic syndrome was not a significant risk factor for development of skin tags. ( $p = 0.25$ ).

## CONCLUSION

This large, prospective observational study indicated several important findings. Despite promising reports published in 1980s, there was no association between the presence of acrochorda and adenomatous polyps. Even in high-risk populations for adenomatous polyps, such as those with metabolic syndrome, acrochorda did not prove to be a marker for polyp detection.