

Clinical Spotlight:

WATS^{3D} Detection of Crypt Dysplasia Allows for Proper Patient Follow-up

CASE SUMMARY:

Patient History:

80-year-old Caucasian male with a long history of esophageal disease and reflux procedures. These include laproscopic hiatal herniorrhaphy with Nissen fundoplication (2002), Barrett's esophageal nodule resection (2015), and ablations (2011, 2018). The patient also has a history of Barrett's esophagus, as well as high grade dysplasia.

The patient experienced continuous reflux symptoms and GERD and was placed in a surveillance program. A year prior to conducting WATS^{3D} on the patient, the facility concluded that there was no hiatal hernia or esophagitis (although there was an irregularity to the Z-line). There was no evidence of Barrett's esophagus by narrow band imaging, Cellvizio (pCLE), and pathology. A year later, the patient underwent WATS^{3D} biopsies.

Biopsy Results:

Forceps Biopsy:

Barrett's esophagus, negative for dysplasia.

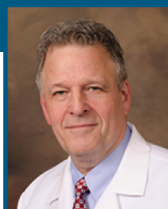
WATS^{3D}:

Columnar epithelium with goblet cell metaplasia, consistent with Barrett's esophagus, with crypt (low grade) dysplasia.

Impact on Patient Care:

WATS^{3D} enabled the patient to be treated for crypt dysplasia, which is known to progress to high grade dysplasia and adenocarcinoma. Dr. Severson was able to identify dysplasia in the crypt part of a gland and properly treat the patient (Ablation, 2018).

“WATS^{3D} not only reduces sampling error and is more sensitive when finding esophageal disease, but it is evident that the technology enables us to identify a disease state in the esophagus that cold forceps can't: Crypt Dysplasia.”



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