The second type is the pedunculated polyp in which invasive carcinoma involves the entire head, but the stalk is free (Fig. 5). There were six patients of this type. Two of them had colonic resection; there was no residual tumor or lymph-node metastasis. Four other patients had no further treatment, and there was no evidence of recurrence one month to two years later.

The third type is the pedunculated polyp with a small focal area of invasive carcinoma limited to the head; the stalk is tumor-free (Fig. 6). There were nine patients of this type. None of them had any further treatment, and there was no evidence of recurrence two months to three years later.

The fourth type is the short-stalked polyp with a small focal area of invasion in the stalk at the line of resection (Fig. 7). There was one such patient. She had colonic resection, and metastasis to one lymph node was found.

The message I would like to get across to you is that one has to know the histologic features of the polyps in order to make the decision for appropriate treatment.

In summary, pedunculated polyps with invasive carcinoma limited to the heads require no further treatment. However, when the carcinoma is undifferentiated, or the heads of the polyps contain cancer-cell emboli, colonic resection is indicated. Pedunculated polyps with invasion into the stalks and sessile polyps with invasive carcinoma require colonic resection. Thank you.

References

Dr. Boggs

Thank you, Dr. Nivatvongs. Our next speaker is Dr. John Christie, of Miami, Florida. Dr. Christie has an extremely interesting and very well done exhibit. I hope all of you have gotten a chance to see it. If you haven't yet, please do before you leave. Dr. Christie is going to talk to us about the colonoscopic excision of sessile polyps.

Colonoscopic Removal of Sessile Colonic Lesions*

John P. Christie, M.D.

Thank you, Dr. Boggs. Ladies and Gentlemen: With pedunculated polyps, we are a little more fortunate in that the stalk, which is to be transected, consists of normal colonic mucosa. Therefore, the margin of transection can more safely be away from the bowel wall. With sessile polyps, the neoplasia creeps along the bowel wall, so that the margin of transection is always right at the bowel wall. Not all sessile polyps can be removed colonoscopically. Therefore, which sessile polyps can and should be removed endoscopically?

These [slide] are the criteria for excisability of sessile polyps, which we have organized on the basis of our own extensive personal experience since that time, 1972. The first factor [slide]: the endoscopic appearance of a lesion is by far the single most important factor in deciding whether a polyp can be removed...
endoscopically. Smooth, soft sessile lesions can generally be removed colonoscopically, regardless of size or location. Villous adenomas, in my experience, are typically not the "shaggy-dog," potassium-losing polyps that we read about and see pictures of in the textbooks. Benign villous lesions, in my experience, are usually finely villous with a soft, irregular surface; when these villous lesions are soft, they generally can be excised endoscopically. Villous lesions are also frequently lobular and, when soft, these can also generally be excised endoscopically.

Sessile lesions are not always as wide at their base as they are in their broadest dimension, so that sometimes a lesion may appear radiographically to be 2 or 3 cm in diameter, and yet when you visualize it, its base is much narrower, making it a less risky procedure. Also, sometimes the base mucosa is somewhat separated from the submucosa as though a stalk were about to form. This makes the transaction also a bit safer for technical factors, which we are going to discuss.

This [slide] is a 2-cm polyp with this [pointer] 4-mm wide ulceration. Ulceration in a sessile polyp, in my experience, is pathognomonic of invasive malignancy, invasive cancer; this should be managed by colonic resection. Ulceration in a sessile polyp means at least a Dukes' B lesion. Villous lesions, even though they are not ulcerated, sometimes are malignant, as you know. It was soft lesion endoscopically, so a segmental resection was performed. This was a Dukes' A lesion. In other words, invasive cancer penetrating beyond the muscularis mucosae, but not into the muscle layer itself.

Certain benign lesions are not suitable for colonoscopic excision, such as this serpiginous benign lesion at the hepatic flexure. This particular one was quite firm. I was suspicious that it might be malignant and felt that it was unsuitable for excision because of its firmness. It was removed by segmental resection and proved to be a villoglandular adenoma.

Now we are going to discuss briefly the other factors [slide]. Location and size are important predicting features, but they are not determining factors. To orient this rather busy slide for you, we are going to refer to our experience with 408 consecutively encountered sessile polyps, ranging from 0.5 to 6.0 cm in size. Three hundred thirty-seven were removed endoscopically. Forty, or 10 per cent, were found at colonoscopy to be unsuitable for endoscopic excision, and therefore laparotomy was recommended. Now, regarding location [slide]: Of these 164 sigmoidal lesions, more than 90 per cent [pointer] were removed colonoscopically, with laparotomy required for only the few [pointer] malignant sessile lesions. In the right colon, it is different; 60 per cent [pointer] of the 98 right-colonic sessile polyps were removed endoscopically, with about 25 per cent [pointer] requiring laparotomy. A little more than half of the laparotomized lesions [pointer] were malignant, so you can see that there is a high degree of selectivity for colonoscopic polypectomy.

With regard to size, there were about 300 polyps less than 2 cm in size. Seven of these eight [pointer] were malignant, so that malignancy is the primary indication for laparotomy for lesions less than 2.0 cm in size. On the other hand, of the 4.0-6.0-cm lesions [pointer], more than half were removed colonoscopically. One third [pointer] required laparotomy, again often for malignancy, although there were some benign lesions in the laparotomy group also. There were also a few lipomas in this large-lesion group, removal of which was not necessary.

I have removed a 9-cm villous adenoma from the rectum endoscopically, but if we stay within the abdomen . . . this [slide] is the largest lesion that I have removed from within the abdomen colonoscopically. The patient was an obese, elderly diabetic hypertensive man in whose case a general surgeon performed sigmoidoscopy and, at the 12-cm level, saw this 6-cm villous tumor. It was a little too high for the posterior proctectomy approach. It was considered a very low-lying lesion, although a low anterior resection probably could have been accomplished. The surgeon was reluctant to operate, and sent the patient to me in hope that possibly another method might be successful. When we viewed this lesion, even though it was angry-looking, with its irregular surface, it was soft and it was not ulcerated. Because of the extenuating circumstance, I undertook polypectomy using the piecemeal polypectomy technique, which I am going to describe. This lesion was removed in three separate sessions, four to six weeks apart. At the fourth procedure, there was a small nubbin of residual tissue, and at the fifth procedure there was no residual. It was a benign villous adenoma.

Now, instrument control [slide]: One must not only be able to reach the polyp in question, but one must have good control of the tip of the colonoscope in order to accomplish removal of any polyp, especially sessile polyps. Although the cecum is not usually turned in, as it is on this diagram [slide], occasionally