SESSILE SERRATED POLYPS

(By Dr Andrew Bryant)

It has been apparent over the last three to four years there is an increasingly recognized new form of pre-malignant colonic polyp called a sessile serrated adenoma. It is related to hyperplastic polyps but the serrated part of the name relates to a serrated pattern of the cells in the crypt. This form of polyp has a malignant potential approximately equal to traditional villous adenomas. Also, as indicated by the name these lesions are often flat and can be difficult to identify particularly in a bowel which has not been adequately prepared. Also being flat these lesions are not identified on imaging such as CT colonography. They are often right sided but can occur in any part of the colon. They can occur as sporadic new mutation growths or as part of a family cancer syndrome such as heredity non-polyposis colorectal cancer (HNPCC). In this condition there is a germ-line mutation in DNA mismatch repair proteins which leads to an increased risk of cumulative mutation which goes uncorrected over time. HNPCC is a confusing term. Polyps do occur in this condition. The non-polyposis component of the title simply means this is not adenomatous polyposis coli (APC) which leads to thousands of polyps in the full blown condition and necessitates total colectomy no later than early adulthood.

There was an interesting population study in Canada looking at the effect of colonoscopy in preventing subsequent development of colorectal cancer. They found that having a colonoscopy reduced the chance of subsequent colorectal cancer by 33%. I think these figures were disappointing but interestingly the chance of a left sided cancer developing after a colonoscopy was reduced by 66% but the chance of the right sided cancer occurring was not significantly reduced at all! I suspect these results relate to two issues. The overall quality of colonoscopy in Canada and possibly North America as a whole is poor. I think these results also reflect the failure to identify sessile serrated polyps and remove them from the right colon.

Since sessile serrated polyps are often flat and can be large their removal sometimes requires lifting with saline prior to polypectomy. The technique of saline lifting has certainly improved the safety factor associated with the removal of large polyps.

In summary sessile serrated polyps are significant lesions which need to be removed to reduce the risk of subsequent colorectal cancer. They do have a malignant potential and they can only be identified with a thorough colonoscopy through a well prepared colon. Radiological studies are inadequate.