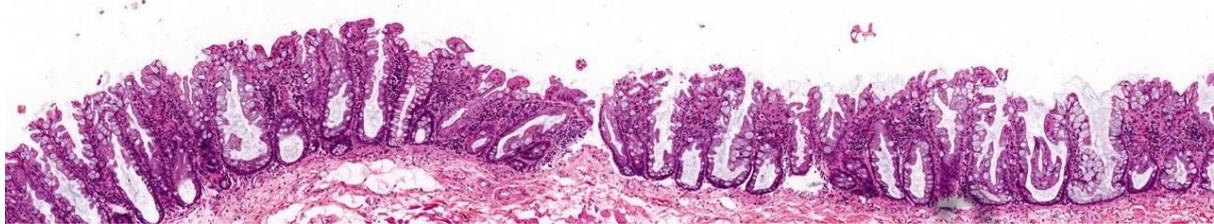


The sessile serrated adenoma (SSA) is the prototype of the serrated neoplasia pathway and as such is the precursor of up to 20% of colorectal carcinoma. They have a similar risk of colorectal carcinoma as conventional adenomas but with a longer dwell time (mean 17 years) before progression to dysplasia and carcinoma. Once thought rare, we now appreciate that they are common polyps representing 14.7% of all colorectal polyps received at our practice.



Definition: A neoplastic polyp characterised by serrated architectural features and lack of cytological dysplasia.

Risk factors: Older age, female gender, smoking, possibly obesity

Clinicopathological features: Mean age 58, female predominance, predominantly proximal, mean size 8.5mm

Molecular biology: Very frequent *BRAF* mutation and the CpG island methylator phenotype

Risk of malignant progression: Overall similar to a tubular adenoma but with a long dwell time (mean 17 yrs)

Risk of metachronous carcinoma: Significant (similar to a conventional adenoma); odds ratio 2.75 (conventional adenoma 2.51); risk of carcinoma at ten years 2.56%

Surveillance guidelines (American Gastroenterology Association):

1. SSA(s) <10mm – colonoscopy at five years
2. SSA(s) >10mm – colonoscopy at three years

Serrated polyposis syndrome (SPS):

A polyposis syndrome for which the genetic basis remains unknown. Therefore, this remains a clinicopathological diagnosis. The criteria are:

1. At least five serrated polyps proximal to the sigmoid colon with two or more >10mm
2. Any number of serrated polyps in an individual with a first degree relative with serrated polyposis syndrome (this criteria is rarely used on its own)
3. >20 serrated polyps of any size distributed throughout the colon

Some authors recognise two types of SPS: (1) multiple polyps but with a particular predilection for large, proximal SSAs and (2) large numbers of small polyps (mostly hyperplastic polyps) throughout the colon. The first of these is thought to have a more substantial risk of malignancy.

Surveillance guidelines SPS: Yearly, although this can be modified on a patient by patient basis

Further reading:

Bettington et al; Critical appraisal of the diagnosis of the sessile serrated adenoma. American Journal of Surgical Pathology 2014;38:158-166

Rune et al; Increased risk of colorectal cancer development among patients with serrated polyps. Gastroenterology 2015, epub ahead of print.

Lieberman et al; Guidelines for Colonoscopy Surveillance after Screening and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. Gastroenterology 2012;143:844–857

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