TE AHO O TE KAHU CANCER CONTROL AGENCY

MINISTRY OF HEALTH MANATŪ HAUORA

New Zealand Government

UPDATE ON POLYP SURVEILLANCE GUIDELINES

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INTRODUCTION

Te Aho o Te Kahu, the Cancer Control Agency (TAoTK) in partnership with the National Screening Unit, Ministry of Health (the Ministry) endorses this advice on surveillance colonoscopy for follow-up after removal of polyps. This advice sets out appropriate practice for clinicians to follow subject to their own judgement. It has been developed to help them make decisions in this area.

The advice was developed to align with recent publications from the United Kingdom, the United States, Australia and Europe (Cancer Council Australia Surveillance Colonoscopy Guidelines Working Party 2019; Gupta, Lieberman et al 2020; Hassan, Antonelli et al 2020; Rutter, East et al 2020). These publications, based on updated available evidence up to June 2019, indicated that previous guidelines would now recommend over surveillance for some groups.

A technical advisory group with the required expertise was established and has undertaken a systematic review of recent literature. Members of the group included a range of clinicians and some members of the National Bowel Cancer Working Group (NBCWG). Their role was to review the evidence and consider implementation of a similar polyp follow-up approach in New Zealand.

The New Zealand specialists in the technical advisory group are routinely involved in the diagnosis, management and surveillance of patients identified to have bowel polyps.

Acknowledgements go to:

- Ian Bissett, Chair of NBCWG, Colorectal surgeon, Department of Surgery, University of Auckland
- Susan Parry, Gastroenterologist, Clinical Lead of National Bowel Screening Programme, Ministry of Health
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- Teresa Chalmers-Watson, Gastroenterologist, Canterbury DHB, University of Otago.

For New Zealand's previous *Guidance on Surveillance for People at Increased Risk of Colorectal Cancer*, published in February 2012, go to **www.health.govt.nz/publications**.

Ensuring an equity focus is a priority for TAoTK and the Ministry. Evidence indicates that Māori are less likely to have access to early diagnosis for some cancers, including colorectal cancers, than non-Māori. Breaking down barriers for Māori to access surveillance colonoscopy will allow a greater proportion of cancers to be detected early and managed well, leading to more curative treatment and subsequent improvements in survival for Māori patients.

Note: This document is updating only the polyp surveillance section of the previous guidelines. An update on other aspects will also be developed. New Zealand colonoscopy capacity is constrained, and we anticipate that these guidelines will reduce demand.

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PURPOSE OF THIS ADVICE

The main purpose of this document is to provide recommendations for surveillance after colonoscopy and complete removal of adenomas and serrated polyps. The recommendations are the same for initial and subsequent procedures and may, if **appropriate**, be applied to colonoscopy procedures that have been completed before we released this guidance.

Patients outside the scope of this advice are those with hereditary colorectal cancer syndromes (for example, Lynch syndrome or Familial Adenomatous Polyposis), inflammatory bowel disease, personal history of colorectal cancer, and family history that warrants investigation for hereditary colorectal cancer syndromes (Ministry of Health 2012).

AUDIENCE FOR THESE GUIDELINES

This advice is relevant to clinicians providing colorectal polyp surveillance. All district health boards, whether or not they have begun to participate in the National Bowel Screening Programme, are expected to offer colonoscopic polyp surveillance in line with this advice.

ASSOCIATED DOCUMENTS

Table 1: Associated documents

Ministry of Health. 2012. *Guidance on Surveillance for People at Increased Risk of Colorectal Cancer*. Retrieved 13 August 2020, from https://www.health.govt.nz/system/files/documents/publications/colorectal-cancer-surveillance-guidance.pdf
Rutter MD, et al. 2020. British Society of Gastroenterology/Association of Coloproctology of Great Britain and Ireland/Public Health England post-polypectomy and post-colorectal cancer resection surveillance guidelines. *Gut* 69(2): 201–23.
Gupta S, et al. 2020. Recommendations for follow-up after colonoscopy and polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer. *Gastrointestinal Endoscopy* 91(3): 463–85. e465.

EQUITY

Survival outcomes for colorectal cancer are significantly poorer for Māori than for non-Māori. Comorbidity and difficulties with accessing health services for colon cancer account for about 30 percent of excess mortality among Māori (Hill, Sarfati, et al 2010). Māori and Pacific peoples are also more likely to be diagnosed with advanced disease at diagnosis of colorectal cancer and, significantly, are more likely to be diagnosed after they present at an emergency department, which may reflect poorer access to primary and secondary services (Health Quality & Safety Commission New Zealand 2017). For this reason, it is important that clinicians make decisions that contribute to equitable outcomes for Māori and Pacific peoples in particular. However, surveillance intervals are determined by the biology of premalignant polyps. There is no evidence that adenomas and serrated polyps grow faster in Māori and Pacific peoples.

NOTES ON CLINICAL CONTEXT

High-quality colonoscopy is the prerequisite for these recommendations. To be of high quality, the colonoscopy must involve verified and documented caecal intubation, good colonoscopy technique and adequate bowel preparation (see 'Definitions' below). Surveillance should be adjusted for suboptimal colonoscopy.

Recommended techniques for polypectomy should be followed and complete polyp excision should be performed (see 'Definitions' below).

POLYP RISK CATEGORIES

Table 2: Polyp risk categories

	Conventional adenomas	Serrated polyps
Average-risk polyps	Tubular adenomas < 10 mm	Sessile serrated lesion (SSA/P) < 10 mm Hyperplastic polyp ≥ 10 mm*
High-risk polyps	Adenoma ≥ 10 mm** Adenoma with tubulovillous or villous histology** Adenoma with high-grade dysplasia**	Sessile serrated lesion (SSA/P) ≥ 10 mm Sessile serrated lesion (SSA/P) with dysplasia Traditional serrated adenoma Serrated adenoma, unclassified (unclassified serrated polyp with dysplasia)

* Follow up as a high-risk polyp if concern exists about consistency in distinction between sessile serrated lesion and hyperplastic polyp locally.

** Advanced adenoma defined as: 10 mm or larger in size or 25% or greater villous histology (that is, tubulovillous or villous adenoma) or high-grade dysplasia.

After piecemeal resection of polyps **equal to or greater than 20 mm** in size, the site should be checked within two to six months and then a further full colonoscopy performed after an additional 12 months. Once no recurrence is confirmed patients should undergo post polypectomy surveillance after a further interval of three years. The need for further surveillance should then be determined in accordance with this update and individual risk factors.

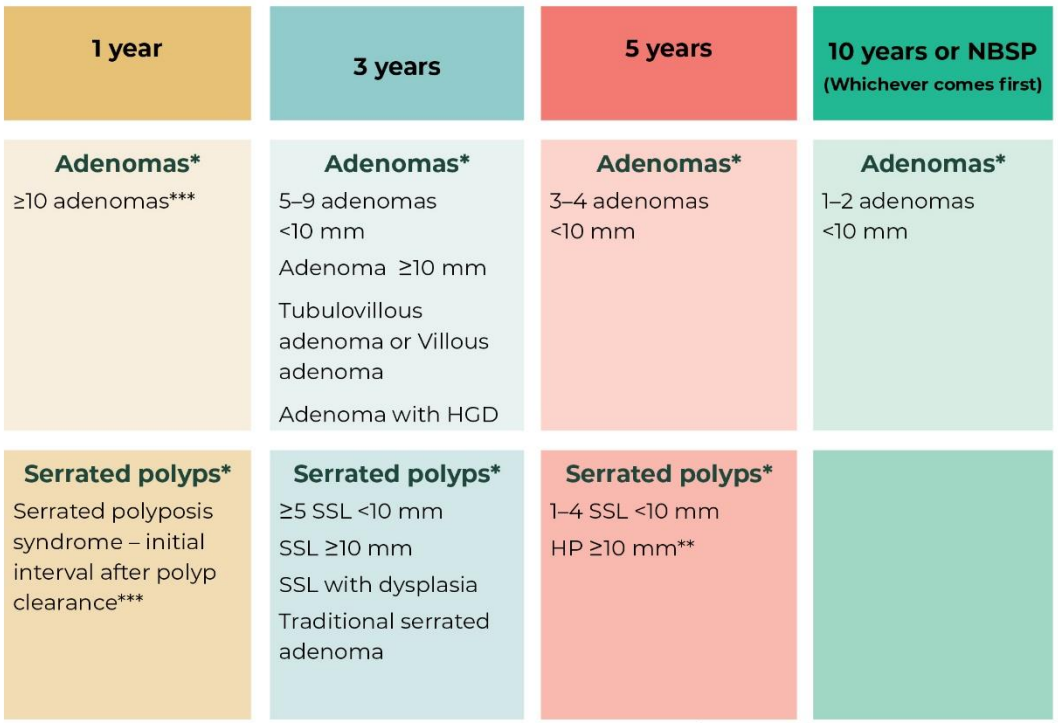
No surveillance is required for anyone who has only hyperplastic polyps smaller than 10 mm, unless the person meets the criteria for Serrated Polyposis Syndrome.

POLYP SURVEILLANCE GUIDANCE 2020

Figure 1 summarises the new guidance after complete removal of adenomas and serrated polyps. This advice was developed in recognition of the:

1. low risk of future colorectal cancer for some groups of patients identified as having adenomas
2. colorectal cancer risk associated with some serrated polyps.

Figure 1: Surveillance intervals based on findings at high-quality colonoscopy



* If there are both adenoma <10mm and SSL <10 mm, sum up the numbers and apply follow-up interval for SSL.

** A three-year follow-up interval is favoured if concern about consistency in distinction between sessile serrated lesion and hyperplastic polyp locally.

*** Consider referral to the NZ Familial Gastrointestinal Cancer Service (NZFGCS). Referral criteria for multiple adenoma and Serrated Polyposis Syndrome to NZFGCS are provided below.

NBSP: National Bowel Screening Programme

SSL: Sessile serrated lesion (=sessile serrated adenoma/polyp)

HGD: High grade dysplasia

HP: Hyperplastic polyp

For people older than age 75 years or with significant comorbidities, carefully consider potential benefits and risks before offering any routine surveillance.

This advice needs to be interpreted taking the patient's family history of bowel cancer into account.

Surveillance colonoscopy should only be performed in people whose life expectancy is > 10 years and therefore generally not in people older than 75 years.

DEFINITIONS

High-quality colonoscopy

The decision on future surveillance can only be made if the colonoscopy was of sufficient quality.

A full description of what constitutes the expected good practice is described in the Standards for Individuals Performing BSP colonoscopy (Endoscopy Governance Group for New Zealand 2017).

The basic principles include:

1. The colonoscopy is performed by a credentialed colonoscopist, as defined by the Endoscopy Guidance Group for New Zealand (Endoscopy Guidance Group for New Zealand 2018).
    a. The bowel preparation is sufficiently clear, defined as both a; Boston Bowel Preparation Score (BBPS) on withdrawal of 6 or higher, with no single segment score under 2.
    b. Subjective rating of Excellent or Adequate (the top two categories on the drop-down menu from Provation).
2. There is photo documentation of caecal intubation and retro flexion in the rectum.

High-quality polypectomy

Endoscopic polypectomy should ensure complete removal of all neoplastic tissue.

Polyp size should be measured using the width of a snare (Gupta, Lieberman, et al 2020).

Morphology of the polyp should be assessed using the PARIS classification and the pit pattern interpreted using virtual or chromoendoscopy.

Removal of polyps assessed to be difficult (e.g. by the Size, Morphology, Site and Access criteria) which includes those larger than 2cm should be considered for deferring for an appropriately experienced and skilled (Level 4) endoscopist.

The European Society of Gastrointestinal Endoscopy's 2017 clinical guideline is the current best-practice guideline for performing colonoscopic polypectomy of different morphology, size and location (Endoscopy Governance Group for New Zealand 2017; Ferlitsch, Moss, et al 2017; Sidhu, Tate, et al 2018).

Boston Bowel Preparation Scale

The Boston Bowel Preparation Scale (BBPS) is a scale that describes the quality of bowel preparation at colonoscopy. The large bowel is divided into three sections: the right colon, the transverse colon (including flexures) and the left colon with rectum. Each section is scored individually from 0–3 (Rosty, Brosens et al 2019).

- 0 = Unprepared colon segment with mucosa not seen due to solid stool that cannot be cleared.
- 1 = Portion of mucosa of the colon segment seen, but other areas of the colon segment not well seen due to staining, residual stool and/or opaque liquid.
- 2 = Minor amount of residual staining, small fragments of stool and/or opaque liquid, but mucosa of colon segment seen well.
- 3 = Entire mucosa of colon segment seen well with no residual staining, small fragments of stool or opaque liquid.

These segment scores are summed for a total BBPS score ranging from 0–9.

Serrated Polyposis Syndrome

The updated World Health Organization criteria for diagnosis are:

- **Criterion 1:** At least 5 serrated polyps proximal to the rectum all ≥5 mm, with at least two ≥10 mm.
- **Criterion 2:** More than 20 serrated polyps of any size but distributed throughout the large bowel, with at least 5 proximal to the rectum (Dekker, Bleijenberg, et al 2020).

Any histologic subtype of serrated polyp is included in the final count. The diagnosis may require more than one colonoscopy and the polyp count is cumulative over time.

REFERRAL CRITERIA TO THE NEW ZEALAND FAMILIAL GASTROINTESTINAL CANCER SERVICE

Serrated Polyposis Syndrome

Refer a patient to the New Zealand Familial Gastrointestinal Cancer Service where they meet the World Health Organisation (WHO) criteria for a diagnosis of SPS and have one of the below features:

- Age < 50 years
- Personal history colorectal cancer (CRC)
- First degree relative with CRC or SPS diagnosed at age <50 years
- > 20 polyps and 2 > 10mm (meet both WHO 2019 SPS criteria 1 and 2)
- Presence serrated lesions with dysplasia.

Multiple adenoma

Refer a patient to the New Zealand Familial Gastrointestinal Cancer Service where they have:

- 10 or more adenomas at one time (if aged over 70 years, patient must have at least one advanced adenoma), or
- 5 or more advanced adenomas at one time, or
- 20 cumulative adenomas, or
- 10 cumulative adenomas if the patient is aged 30 years or younger.

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