ARGANZ Rectal Focus group statement on MRI Rectal Rebate changes

ARGANZ is very supportive of the changes to the MRI item 63476, which now covers an MRI pelvis for initial staging, restaging or follow up of rectal cancer.

Given the rapid advances in the treatment and management of rectal cancer in the last 5 years, particularly the growing use of non-operative management, this amendment is very important for patients with rectal cancer.

The new item descriptors are:

63476 MRI—scan of the pelvis for the initial staging, restaging or follow up of rectal cancer, if:

(a) a high resolution T2 technique is used; and
(b) the request for the scan identifies that the indication is for:
  (i) the initial staging of rectal cancer (including cancer of the rectosigmoid and anorectum); or
  (ii) the initial assessment of response to chemotherapy or chemoradiotherapy; or
  (iii) the assessment of possible recurrent tumour after complete response to neoadjuvant therapy, within an active surveillance program; or
  (iv) the assessment of recurrent disease prior to treatment planning (R) (Contrast) (Anaes.)

The ARGANZ Rectal Focus group would like to highlight several points in relation to these new descriptors.

a) **High Resolution T2 technique**: is defined as 3mm slices, 0.6 x 0.6 in plane resolution, achieving a voxel of <1.2mm^3 [1]. Adequate signal averages are also required (minimum 2-3, depending upon field strength and type of magnet, ideally 3-4). All centres should ensure their high resolution sequences match these recommendations as a minimum. Use of newer acceleration techniques should maintain high spatial resolution quality. Sample protocols available on the ARGANZ website [2]. Only 2D high resolution T2 images should be used for primary staging assessment.

i) **Initial staging MRI** should include the mrT, N, EMVI and CRM status of every tumour. The distance from the puborectalis sling / ano-rectal junction is recommended. Template reports are recommended and examples are available on the ARGANZ website [2].

ii) **Initial post treatment assessment** should include an mrTRG score, until such time as there is an agreed international alternative [3]. This score includes **any** residual disease in the mesorectum (primary, LN, TD, EMVI). The purpose of this scan is to identify any progression, downstaging which may impact surgery, or remaining tumour which may make it inappropriate for the patient to have non-operative management. It is combined with clinical and endoscopic assessment to provide a clinical response.

iii) **Assessment for recurrent tumour on an active surveillance program** should be performed in conjunction with clinical assessment. The report should include an mrTRG score, until such time as there is an agreed international alternative [3,4]. This score includes **any** residual disease in the mesorectum (primary, LN, TD, EMVI). It is combined with clinical and endoscopic assessment to determine clinical complete response (cCR). The MRI particularly assesses any regrowth of tumour deep to the mucosa and in the mesorectum, which may not be visible at endoscopy. Pre-treatment images should be reviewed concurrently to allow interpretation of follow up scans. Up to 30% of patients on a watch & wait (W&W) / active surveillance program will be expected to regrow [4]. The aim is to identify these while they are still eligible for salvage surgery.

iv) **Assessment of recurrent disease** covers patients who require mapping of disease recurrence for treatment planning, including advanced pre exenteration cases. This may be a different imaging protocol, including post contrast imaging for extensive disease.

Timing of scans

The first post treatment scan timing depends upon local site preference, noting increased downstaging of responding tumours with time after chemoradiotherapy.

For patients on active surveillance in a Watch and Wait program, based upon the current evidence and the schedule in the Australian multicentre RENO trial (REctal cancer No Operation) [6], a recommended MRI follow up schedule for patients is;

- 3 monthly in the first year following treatment
- 3 or 6 monthly in year 2 post treatment
- 6 monthly in years 3-5 post treatment
- 3 month repeat scan if there is concern regarding regrowth and the patient does not go to surgery

The second 3 month scan (i.e 6 months post treatment) is particularly important for patients deemed eligible for W&W. The first 3 month scan can be difficult to interpret due to intermediate signal from evolving scar and the follow up MRI assists in differentiation between scar consolidation and tumour regrowth. Amendments to timing recommendations may be made with future evidence. There is no specified limit on the total number of scans for a patient who meets the criteria.

ARGANZ Rectal Focus Group

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More information available at https://www.arganz.org/about/arganz-focus-groups/rectal-focus-group/

REFERENCES

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2. https://www.arganz.org/resources/
3. Sclafani F, Brown G, Cunningham D, et al. Comparison between MRI and pathology in the assessment of tumour regression grade in rectal cancer. *Br J Cancer*. 2017;117(10):1478-1485. doi:10.1038/bjc.2017.320
4. Siddiqui MR, Bhoday J, Battersby NJ, et al. Defining response to radiotherapy in rectal cancer using magnetic resonance imaging and histopathological scales. *World J Gastroenterol*. 2016;22(37):8414-8434. doi:10.3748/wjg.v22.i37.8414
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6. A Longitudinal Cohort Study of 'Watch and Wait' in Complete Clinical Responders after Chemo-radiotherapy for Localised Rectal Cancer. REctal cancer No Operation (RENO). Trial protocol at https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?id=376810. Accessed 12.11.24

LN - Lymph nodes
TD - Tumour deposits
EMVI – Extramural venous invasion

MRI scan of the pelvis for the initial staging, restaging and follow up of rectal cancer (MBS Item 63476)
Clinical Notes https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=63476&qt=item#assocNotes

Item 63476 is for an MRI scan of the pelvis for the evaluation of rectal cancer.

Where available, MRI scanning should be requested by the patient's specialist or consultant physician following consideration of their management at a properly constituted oncological multidisciplinary team meeting.

Medicare benefits are not payable for surveillance of clinically well patients following completion of therapy, noting this does not exclude patients participating in active surveillance following complete clinical response.