



LETTER TO EDITOR

Impact of PET scan in staging and managing primary rectal cancer



Dear Editor,

We read with interest on the opinion of the paper by Atsushi Ogura et al¹ in your journal which concluded that extended lymphadenopathy for isolated extra-regional lymph node metastasis in colorectal cancer might be able to improve prognosis in patients with limited extra-regional lymph node metastasis. This opinion may be true but an accurate staging protocol is of utmost importance. We know that conventional staging of primary rectal cancers uses only structural imaging modalities (CT and MRI), however the accuracy of lymph node metastasis is difficult. We have demonstrated that the addition of functional imaging modality (PET scan) to identify nodal involvement may be more accurate and this may translate to better decision making and treatment outcome. Interestingly, we found 22.7% patients to have nodal stage migration just by adding PET scan and hence, may determine treatment strategy for best survival outcome.

We have conducted a hypothesis generating study based on a case series of 22 patients with mid and low primary rectal cancer (<10 cm from anal verge) to determine whether addition of PET scan to conventional staging modality (CT and MRI) would alter clinical staging of primary rectal cancer and if these changes would change management plans.

All patients were staged with PET scan, CT TAP (thorax, abdomen and pelvis) and MRI pelvis. Two staging reports (conventional staging (based on CT TAP and MRI) and newly proposed staging (based on CT TAP, MRI and PET scan)) were studied and management determined based on each report.

Stage migration were compared between the new and conventional staging methods, highest migration in staging was observed in stage Nodal, N (22.7%), followed by distant metastasis, M stage (9.1%) and finally tumour size, T stage (4.5%). Overall, 81.8% patients were unchanged, while 13.6% had a decrease in stage and 4.5% were upstaged.

It is interesting to note that this new information predicts that 22.7% of patients had change in management.

Studies have shown that colorectal carcinoma is the second commonest carcinoma in the world, including Malaysia.² Rectal carcinoma accounts for 40% of these.³ About 50–85% of patients with colorectal cancer undergo operations with curative intent.⁴ Therefore, it is essential to diagnose early and accurately stage these patients to allow optimal patient management and improvement of survival rate.⁵

In the last 10 years the mortality rate of colorectal cancer (CRC) has decreased by more than 20% due to the rising developments in diagnostic techniques and optimization of surgical, neo-adjuvant and palliative therapies.⁶

Therefore, we concluded that the addition of PET scan is important and should not be dismissed as it appears to change clinical staging and may potentially alter the management of primary rectal cancer. Accurate pre-operative staging especially nodal staging is extremely important before deciding to embark on extended lymphadenectomy to give patients the best treatment outcome.

Conflicts of interest

All authors declare there is no conflict of interest.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.asjsur.2018.10.006>.

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