European Journal of Surgical Oncology 45 (2019) 1745–1746

Contents lists available at ScienceDirect

European Journal of Surgical Oncology

journal homepage: www.ejso.com

Differences in cutaneous melanoma outcomes with changes in lymphoscintigraphy timings?

Keywords:
Sentinel lymph node biopsy
Melanoma
Lymphoscintigraphy

Dear Editor,

We are writing in response to the very interesting recent article by O'Leary et al. entitled "Survival outcomes and interval between lymphoscintigraphy and SLNB in cutaneous melanoma-findings of a large prospective cohort study" [1], published in November 2018.

Whilst we agree with many of the points and assertions that O'Leary et al. make in their paper, our data disagrees with the central claim that delaying radiocolloid injection by more than 12 hours has a negative impact on patient survival in the long term or that time to lymphoscintigraphy (LSG) is an independent risk-factor. At the Cambridge melanoma unit, based at Addenbrooke's Hospital, which is also at a tertiary referral centre, a total of 755 patients underwent sentinel lymph node biopsy (SLNB) between 1st January 2008 and 31st December 2017, of which we have LSG timings for 386 patients.

Firstly, and perhaps most importantly, our data suggests that there is no significant difference between the two patient groups: those that had the LSG on the day of SLNB (referred to as the "Early" group) and those that had the LSG at least 12 hours before the operation ("Late"). Using the same Kaplan-Meier survival analysis as in the paper discussed, there is what appears to be an increase in disease specific survival (DSS) in the Late group compared to the Early group, which upon statistical analysis was found to not be significant ($p = 0.567$, Logrank test) (Fig. 1). As such, our hazard ratio is lower than that of the Norwich and Norfolk Hospital team, 1.24 compared to 1.82 for DSS.

At our centre there is not a difference in number of sentinel lymph nodes removed, with 1.30 ($SD \pm 0.62$) in those in the Late group compared to 1.56 ($SD \pm 0.88$) in the Early group ($p = 0.928$ Mann-Whitney *U* test). We did find that there was, expectedly, a difference between the radioactivity in the two patient groups. The radioactivity count was recorded for each patient and the Late group showed a lower radioactivity count in the nodes being removed ($p < 0.001$, Mann-Whitney *U* test).

We also found that there was no difference in the number of positive nodes that were removed ($p = 0.215$), which support our survival data, as it is part of the criteria for AJCC staging for melanoma beyond stage 3A. As AJCC staging is an independent indicator of mortality, it suggests that there is no long term survival difference between the two groups in our centre.

The discrepancies between the two centres' results could be due to a number of reasons such as policy change or the colloids used in the LSG. As the Norwich and Norfolk University Hospital group mention in their discussion they, like many centres, have moved away from the 2-day approach because it was thought that there was a survival difference. This means that the 2-day approach patients are more likely to be less recent patients and therefore may have reduced survival outcomes because melanoma care is always improving; from local advancements in surgery simply from performing more operations to large scale changes with the development of non-surgical therapies. There may also be differences in centre-specific scheduling policies, perhaps a patient that is clinically thought to be more progressed is scheduled for first in the list, necessitating a greater than 12 hour LSG window as the colloid would have to be administered the day before. The difference could also be due to the data collected by us. Our patient population is quite large ($n = 386$) but was limited by archiving constraints and it was smaller than that of the paper by O'Leary et al.

Overall, it would seem that more data needs to be evaluated from as many centres as possible to reconcile these observed differences. However in our study we have seen no differences in survival rates or in other independent risk factors, such as SLN positivity.

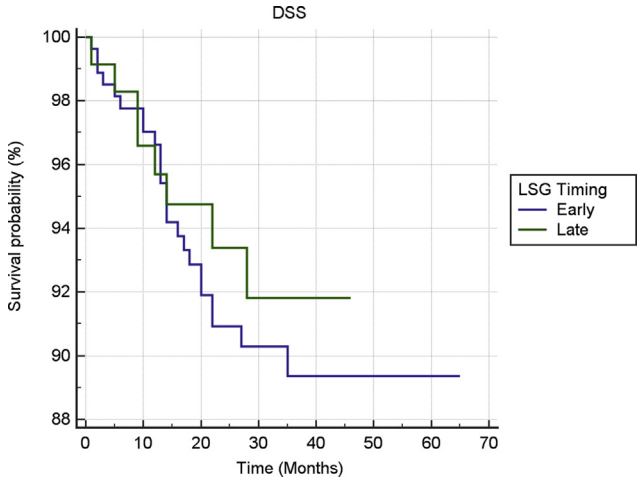

Fig. 1. Disease specific survival (DSS) shows that there is no significant difference between the "Early" and "Late" groups ($p = 0.567$).

https://doi.org/10.1016/j.ejso.2019.03.007

Conflict of interest

The authors have no conflicts of interest to disclose.

Fundings

No funds were received for this work.

Reference

[1] O'Leary FM, Beadsmoore CJ, Pawaroo D, Skrypniuk J, Heaton MJ, Moncrieff MD. Survival outcomes and interval between lymphoscintigraphy and SLNB in cutaneous melanoma- findings of a large prospective cohort study. Eur J Surg Oncol 2018;44:1768–72. https://doi.org/10.1016/j.ejso.2018.06.011.

Torin H.A. Elmhirst*, Amer J. Durrani, Animesh J.K. Patel
Addenbrooke's Hospital, Hills Road, Cambridge, CB2 0QQ, UK

* Corresponding author.
E-mail addresses: thae2@cam.ac.uk (T.H.A. Elmhirst), amer.durrani@addenbrookes.nhs.uk (A.J. Durrani), animesh.patel@addenbrookes.nhs.uk (A.J.K. Patel).

Available online 10 March 2019