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Special Edition

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Streamlining the diagnostic pathway for suspected sarcoma patients

Rowan Hicks¹

¹Advanced Ultrasound Practitioner. Royal Cornwall Hospitals NHS Trust, TRURO, TR1 3LJ, UK.

Email: rowen.hicks@nhs.net

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Background

Soft tissue sarcomas are rare, accounting for less than 1% of all malignant neoplasms, they are however markedly aggressive and associated with poor prognosis (Sinha and Peach, 2010). Five-year survival rates are estimated at just 55% (Public Health England, 2013). Ultrasound is typically the first line imaging modality for assessing enlarging soft tissue masses and is effective at diagnosing common benign differentials, such as cysts and lipomas (Chaves and Dewan, 2019). In England, ultrasound referrals are made under the two-week-wait cancer target (NHS, 2022). Local adherence to this is good, with over 97% of sarcoma referrals receiving an ultrasound within the two-week time frame. MRI, biopsy and multi-disciplinary team (MDT) discussions are routinely required in patients where sarcoma is suspected following the initial ultrasound. It is this stage of the pathway which could be most readily improved, by streamlining early access to biopsy and MRI, as well as coordinating ultrasound lists to maximise MDT meeting efficiency.

Review of the evidence

Full text journal articles from within the last 10 years were reviewed from PubMed, Medline, EMBASE and CINHAL databases. Key search terms were 'Soft Tissue Sarcoma' AND 'Imaging Pathway'. The evidence clearly demonstrates that early diagnosis is key to better surgical outcomes and longer-term sarcoma survival rates (Vibhakar et al., 2021). As such, pathway effectiveness is central to this evidence implementation project. The literature specifically relating to pathway effectiveness is relatively small and mainly constitutes best practice recommendations, such as those published by the European Society of Musculoskeletal Radiology (Noebauer-Huhmann et al., 2015). While these are largely adhered to locally, it is felt that they could be streamlined significantly, and this provides the motivation for this evidence informed change project.

Project plan

Utilising the JBI Evidence Implementation Model (Porritt et al., 2020), this project proposes to retrospectively audit current pathway performance from point of referral to treatment

plan establishment at the MDT meeting. This is an important metric, which determines an accurate waiting time for patients as opposed to measuring the two-week-wait target and identifies opportunity for pathway improvement opportunities. The expectation is this will demonstrate that pathway steps following initial ultrasound could be streamlined to reduce internal delay in referral to treatment times for patients. A stakeholder group will review the data to consider whether a trial involving a dedicated weekly sarcoma ultrasound list, with rapid access to biopsy and protected MRI slots will improve pathway performance. The efficacy of this new provision will then be re-audited and compared with the former arrangements.

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