TH1.3 Initial experience - Magseed for impalpable breast lesion localisation

Grant Harris, Tamer Saafan, Katie Quigley, Gary Bristow, Alice Townend, Magdi Youssef
Northumbria Healthcare NHS Foundation Trust

Aims: Impalpable breast lesions can be localised intraoperatively with Magseed and the Sentimag probe. Advantages over traditional wire localisation include reduced displacement, flexible insertion timescales, reduced patient anxiety and no requirement for radiation governance compared with radio-iodine seeds. We assess outcomes following introduction of Magseed localisation for impalpable breast lesions.

Methods: The first consecutive Magseeds inserted into breast lesions were identified from radiology records in a UK non-screening breast unit from July 2020 to March 2021. Indication for seed, intra-operative complications, margin involvement and re-excision rates were ascertained from electronic patient records. Caldicott / audit department approval was obtained.

Results: 63 Magseeds were inserted in 59 patients. Indications for seed localisation were invasive disease 81% (51/63), DCIS 8% (5/63) and B3 lesions 11% (7/63). 21% (10/47) of patients with invasive disease had received neoadjuvant chemotherapy. The median seed insertion to surgery time was 13 days. All patients underwent standard wide local excision or therapeutic mammoplasty. The lesion localisation rate and seed retrieval rate was 100%, however 2 magseeds (3%) were displaced during dissection. The margin re-excision rate was 15.3% (8/52) in patients with invasive and preinvasive disease. The upgrade rate for B3 lesions was 16.6% (1/6).

Conclusions: Magseed can be used to accurately localise impalpable breast lesions with acceptable margin re-excision rates. These findings during the learning curve would imply that this technique is easy to adopt. Insertion of seeds within 2 weeks of the operation is feasible and should improve radiologist’s efficiency by avoiding on the day wire insertion.