

# Slow Uptake of Surgeons Using Preoperative → Intraoperative Radioisotope Injection for SLNB

## BACKGROUND

- Preoperative → intraoperative injection (PIOI) is defined as technetium (Tc-99m) injection after the patient is asleep but prior to the incision.
- Compared to preoperative injection outside of the OR, this technique has been shown to be equivalent for SLN localization.
- It is safe, avoids scheduling delays, and most importantly avoids pain and anxiety to the patient.
- We sought to identify/assess the barriers that exist in preventing the greater uptake of this procedure in general practice.

## METHODS

- Retrospective chart review of ~1,500 SLN biopsies using PIOI of Tc-99m between the years of 2002-2014 at a single institution.
- Literature review.
- Online survey sent to 59 attendings and 60 current fellows associated with the 48 accredited Breast Surgery Oncology Fellowship Programs.

## RESULTS

- Our single institution's localization rates using PIOI of Tc-99m is 98%, 1451/1481.
- Responses of the survey were collected for six weeks. Questions are in table 1.

Of 119 surgeons surveyed, 45 responded; 18/59 attendings (30.5%) and 27/60 fellows (45%)

Table 1: Preoperative → Intraoperative Injection of Radioisotope Online Survey

| Questions   | Answer Choices  |
|---|---|
| 1. Does your institution allow for PIOI of radioisotope prior to lymph node localization?   | a. Yes<br>b. No<br>c. Other (please specify)  |
| 2. If yes, your institution utilizes PIOI, what are the advantages? Select all that apply.  | a. Patient comfort<br>b. Avoids delays<br>c. Reimbursement<br>d. No, we don't utilize PIOI<br>e. Other (please specify)   |
| 3. If yes, your institution utilizes PIOI, what are the disadvantages? Select all that apply.   | a. Conflicts with Nuclear Medicine (NM)<br>b. Competition for dollars<br>c. No, we don't utilize PIOI<br>d. Other (please specify)                                    |
| 4. If no, what are the barriers to your institution allowing the breast surgery team to inject radioisotope after the patient is asleep in the operating room? Select all that apply. | a. Conflict with NM<br>b. Hospital policy<br>c. Time<br>d. How you were trained<br>e. Not knowing it was an option<br>f. We utilize PIOI<br>g. Other (please specify) |
| 5. Are you aware of RVUs and coding for PIOI?   | a. Yes<br>b. No<br>c. Other (please specify)  |

## Respondents:

1. 38% of attendings/fellows say their institutions allow for PIOI, 56% don't allow for it, 6% are unsure.
2. Advantages include pt comfort, avoiding delays, reimbursement, surgeon directed PIOI.
3. Disadvantages include time it takes in the OR, state laws requiring NM involvement and the lead that carries the Tc-99m is heavy.
4. Barriers include hospital policy, training, no NM at their hospital, unsure about state requirements, requirement for NM license.
5. Of the 45 respondents, 34 (76%) are unaware of RVUs and coding for PIOI.



## CONCLUSIONS

- Our nationwide survey shows there are still barriers that exist in regards to the PIOI procedure.
- Collaboration with NM would assist with some of the perceived barriers to implementation.
- This technique avoids pain/anxiety to the patient and is the right thing to do.
- Safety has been demonstrated in numerous studies.

## REFERENCES

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