THYROID CANCER

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Should Small Low-Risk Papillary Thyroid Cancer Be Called Cancer at All?

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Review of: Shih P, Nickel B, Degeling C, Thomas R, Brito JP, McLeod DSA, McCaffery K, Carter SM 2020 Terminology change for small low-risk papillary thyroid cancer as a response to overtreatment: Results from three Australian community juries. *Thyroid*. Epub 2020 Nov 25. PMID: 33238815.

SUMMARY

Background

Active surveillance of small low-risk papillary thyroid cancers (PTCs) has been shown to be safe and effective (1), yet many clinicians are not actively recommending or explaining this option, and most patients still prefer surgical treatment over active surveillance (2-4). The word *cancer* can cause anxiety and lead patients to choose a more aggressive treatment option (5).

To improve the consideration and adoption of active surveillance of thyroid cancers in appropriately selected patients, a change in the terminology of small PTCs has been proposed (6). This would be a similar change, but on a larger scale, to what occurred with the description of “noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP)” that replaced what used to be termed encapsulated follicular variant of PTC. While a change in the terminology of small PTCs has been proposed, there is not uniform agreement as to whether it is appropriate, given the potential for even small PTCs to metastasize, usually to regional lymph nodes. When discussing this change, patient perspective is equally as important as expert opinion. Prior research has shown that changing the terminology of thyroid cancers may reduce psychological harm to patients, but it also raises concern that it

does not properly define the burden of disease and its risk of progression (7).

Methods

The current study is a qualitative analysis of three community juries (i.e., focus groups of the general public) conducted in Australia using deliberative research methods to consider a terminology change for small low-risk PTCs (8). Forty participants were recruited from three separate communities representing metropolitan, rural, and regional locations (Sydney, Wodonga, and Cairns, respectively) to form three separate juries. Participants were recruited through random-digit dialing and topic-blinded social media advertising to recruit individuals of diverse backgrounds and ages.

Juries were held over 2 days, during which participants were informed about the concepts of thyroid cancer, its overdiagnosis, and its overtreatment via prerecorded video presentations along with live question-and-answer sessions. An expert in thyroid cancer terminology attended each jury to answer questions during the three deliberative sessions. Time-point surveys were taken four times (before expert presentations, after presentations, start of day 2, and end of day 2) to explore changes in jurors' positions over time. At the end of day 2, jurors voted

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to recommend either keeping or changing current thyroid cancer terminology and provided their supporting rationale.

During Jury 1, lack of clarity in the jury charge wording was identified, specifically regarding whether *relabeling* implied a superficial change in name but not a change in pathological classification. This led to refinement of the jury charge after Jury 1 to clearly state that a proposed terminology change referred solely to reclassification and renaming of the disease.

Results

Jury 1 voted 11–2 against changes to thyroid cancer terminology while Juries 2 and 3 were unable to reach a clear majority position (split 7–7 and 7–6 respectively). Jury 1 voted against the change primarily because of a desire for a “truthful” representation of cancer, while Juries 2 and 3 were divided between an objective pathological definition of disease and reducing unwarranted psychological harm caused by the diagnosis. Time-point votes showed that a significant number of jurors (22 of the 40 participants) shifted their positions during the deliberation process, and all jurors recommended: (i) increased education for patients and the public regarding small

low-risk PTCs and (ii) that health care professionals have a responsibility for reducing the harms of overtreatment. Finally, Juries 2 and 3 were conducted outside major metropolitan areas, and these participants recommended that any change in treatment practices should ensure affordability, accessibility, and coverage for rural areas.

Key reasons for not supporting a change in the terminology included that current terminology already reflects the malignant nature of small low-risk PTCs, that more evidence and research are needed, and that new terminology within the definition of cancer may be more appropriate (see table). Key reasons for supporting a change in the terminology included reducing the psychological harm of a cancer diagnosis, that a terminology change would trigger a health system change, and associated social and financial implications (see Table).

Conclusions

Participants were divided on changing the terminology of small low-risk PTCs, highlighting the tension between a pathological and an outcomes-based understanding of the disease. All jurors agreed that practical changes were needed to respond to the harms of thyroid cancer overtreatment.

COMMENTARY

This study (8) highlights the complexity of a proposed terminology change for small low-risk PTCs, and most importantly, it shows the patient perspective on this topic. Often, recommendations and changes are made by experts and medical professionals alone, and this study illustrates both the methodology and importance of obtaining patient input when making changes that will have a broad impact. It is not surprising that the jurors were divided, as there are strong arguments on both sides. The key arguments lie in keeping a true pathologic definition

versus reducing the psychological harm of a cancer diagnosis while increasing uptake of active surveillance. This has been a debate among physicians as well (2,6), and it is something that we have discussed within our division at my institution. Similar to those who participated in this study, my colleagues have also been divided on the topic.

One topic not addressed in this study are other options to reduce overdiagnosis and overtreatment. Increasing the use of active surveillance does accom-

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publish this, and as highlighted in this study, further education and promotion is warranted, but there are other possibilities as well. For one, screening of thyroid cancer is not recommended by the U.S. Preventive Services Task Force (9), and for another, adopting a less aggressive thyroid nodule fine-needle aspiration (FNA) approach would also reduce overdiagnosis and overtreatment. Active surveillance is recommended for papillary microcarcinomas (<1 cm), yet FNA is not routinely recommended for thyroid nodules of this size (10) and therefore should not lead to a diagnosis of cancer. Also, there are differing guidelines on the size cutoff for thyroid nodule FNAs (10,11), and adopting less aggressive size criteria would reduce overdiagnosis. Finally, addressing the increasing prevalence of incidental thyroid nodules (12) and how this impacts overdiagnosis and overtreatment is important.

This study was conducted in Australia, and it is not guaranteed that populations in other countries would have similar opinions regarding changing the terminology of small low-risk thyroid cancers. Nevertheless, this is becoming an increasingly common

conversation among thyroid cancer specialists throughout the world, and the findings of this study add to the growing complexity and importance of appropriately addressing thyroid cancer overdiagnosis and overtreatment.

Reasons for supporting terminology change

- It would reduce the psychological harm of a cancer diagnosis.
- Terminology change would trigger a health system change.
- There would be social and financial implications of changing terminology.

Reasons for not supporting terminology change

- Current terminology reflects the malignant nature of small low-risk PTCs.
- More evidence and research are needed.
- New terminology within the definition of cancer may be more appropriate.

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