

Opinions and practices of otolaryngologists regarding informed consent to surgical interventions with resident involvement

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ABSTRACT

Introduction
The training of surgical resident physicians presents an interesting dilemma relating to informed consent (IC), as patients are often unaware of the extent to which residents are involved in their surgical care. This study evaluated the opinions and practices of academic surgeons regarding IC to surgical interventions with trainee involvement.

Methods
A survey was sent to department chairs and division chiefs of surgical specialties at the top 50 NIH funded institutions in the United States along with an invitation to distribute the survey to their faculty. We compared responses between otolaryngologists and surgeons of other specialties.

Results
25 otolaryngologists and 224 surgeons from other specialties completed the survey. Compared to other surgical specialties, otolaryngologists were more likely to allow residents to perform portions of procedures after having given explicit instructions about what is to be done, while not being in the operating room (p=0.034). Otolaryngologists were more likely to allow residents to perform portions of surgeries without direct supervision and without having given explicit instructions about what is to be done in the procedure (p=0.003). 64% of otolaryngologists felt it is beneficial to inform patients of the role of residents in their surgical care, and 48% of otolaryngologists routinely inform patients of this role.

Conclusion
Otolaryngologists may offer more autonomy to residents in the surgical setting than surgeons in other specialties. There is a divide over the opinions and practices of explicitly informing patients of the level of resident involvement in one's care.

INTRODUCTION

- Informed consent is an integral part of the doctor-patient relationship.
- Physicians have an obligation to train the next generation of surgeons by providing independent operative experiences appropriate for the resident's abilities.
- Informed consent can be a challenging process in this setting as patients are often unaware of the extent of resident involvement in the operating room.
 - When thorough consent is given, some studies suggest the overwhelming majority of patients are understanding and comfortable with resident involvement.
- Prior studies show that a minority of surgeons explicitly inform patients of resident involvement in surgical care.
 - Most of these studies were limited by small sample size as well as specific geographic regions and specific surgical specialties.
 - No studies exist that examine the approach of the otolaryngologist in this scenario
- This study attempts to evaluate the opinions and practices of academic otolaryngologists regarding informed consent to surgical interventions with trainee involvement.



METHODS

- Based off a survey that was effectively used in a similar study, we developed a brief, electronic (REDCap) survey.
- A link to the survey was distributed via email to department chairs and division chiefs (and their secretaries) at the top 50 NIH institutions with a standard introduction to the study and an invitation to forward the link on to surgical faculty at their respective institutions.
 - Two weeks later, a reminder email was sent requesting that chairs/chiefs encourage their faculty to complete the survey if they had not already done so.
 - Two weeks later after the reminder email, the survey was closed.
- Chi-square and Fisher exact tests were used to compare responses between otolaryngologists and surgeons belonging to other specialties (non-otolaryngologists).

RESULTS

Variable	Summary	Variable	Summary
Gender	Female	Years of experience	≤ 5 years
	Male		>5 years
Region	Midwest	Median (IQR)	21 (4, 28)
	Northeast	Do you routinely have residents meet the patients prior to surgery?	Yes
South	No		
West			

Survey Question	Survey Response	Otolaryngology	Non-otolaryngology	p-value
How often have you allowed a resident to perform procedures when you are in the operating room, but not scrubbed in?	0%	4 (16%)	59 (28%)	<0.001
	1-10%	8 (32%)	115 (54%)	-
	>10%	13 (52%)	39 (18%)	-
How often have you allowed a resident to carry out parts of a procedure (for which you have given explicit instructions about what is to be done in the procedure) while you are not in the operating room?	0%	6 (24%)	85 (40%)	0.034
	1-10%	9 (36%)	89 (42%)	-
	>10%	10 (40%)	39 (18%)	-
How often do you allow a resident to carry out parts of a procedure without your direct supervision and without having given explicit instructions about what is to be done in the procedure?	0%	14 (56%)	177 (83%)	0.003
	1-10%	9 (36%)	30 (14%)	-
	>10%	2 (8%)	6 (3%)	-
Do you routinely inform patients of the expected role a resident will/might play in the operating room during the operation?	Yes	12 (48%)	110 (52%)	> 0.05
	No	13 (52%)	103 (48%)	-
If no, which of the following most closely matches your reasoning (may select multiple responses)?	It is important and I should probably do it, but don't due to various reasons	1 (8%)	4 (4%)	> 0.05
	It has value, but it may cause the patient undue concern or stress	2 (15%)	18 (18%)	-
	If the patient trusts me, he/she does not need to know the role of the resident	1 (8%)	12 (12%)	-
	I work in a teaching environment and participation of residents in procedures is standard and expected	13 (100%)	79 (77%)	-
	Other (free response)	2 (15%)	6 (6%)	-
How do you respond when patients directly inquire about the role of residents in their surgical care?	A trained resident will perform portions of the procedure appropriate to his/her level of training under my supervision	5 (20%)	59 (27.7%)	> 0.05
	I will perform the procedure with the assistance of a resident	7 (28%)	72 (33.8%)	-
	Surgery is a team effort that requires several different members and I lead that team	13 (52%)	7 (36.2%)	-
	Other (free response)	0 (0%)	5 (2.3%)	-
	All things considered, do you feel that explicitly informing a patient about the role of a resident in their care is more beneficial or more detrimental to patients' well being?	Beneficial—it helps the patient better trust me and the residents who work with me	13 (52%)	114 (51%)
Beneficial—it helps overcome the misperception that residents provide inferior care		3 (12%)	38 (17%)	-
Detrimental—it causes unnecessary and unwarranted worry for patients		6 (24%)	54 (24%)	-
Detrimental—can damage trust with patients for whom detailed informed consent has already been provided in the past		2 (8%)	7 (3%)	-
Other (free response)		0 (0%)	0 (0%)	-
If you have not explicitly explained the role of residents in operative procedures, how uncomfortable have you felt about his?	Very uncomfortable / A little uncomfortable	4 (16%)	33 (15%)	0.92
	Indifferent	5 (20%)	51 (24%)	-
	Very comfortable / Comfortable	13 (52%)	88 (42%)	-
	I always explain the role of residents	3 (12%)	41 (19%)	-
In general, how do you feel about the effects resident involvement has on patient outcomes?	Improves outcomes / Mildly improves outcomes	16 (64%)	134 (63%)	0.09
	Has no effect	4 (16%)	61 (29%)	-
	Worsens outcomes / Mildly worsens outcomes	5 (20%)	17 (8%)	-
Do you have any additional thoughts about informing patients about the role of residents in surgical procedures?	(free response)	7 (28%)	58 (26%)	> 0.05

DISCUSSION

- Compared to other specialties, otolaryngologists were more likely to allow residents to perform with limited or no supervision in the operating room.
 - Possible reasons may include:
 - Nature of operative cases
 - Only space for one set of hands
 - Degree of complexity
 - Attitude/culture of the specialty
- The vast majority (80%) of otolaryngologists feel that resident involvement in surgical care either improves or has no effect on outcomes.
- Like other surgeons, otolaryngologists respond with varying degrees of transparency when patients ask, "who will be performing my surgery?" A generalized reply is more common than a specific, explicit explanation.
- Nearly half of otolaryngologists routinely describe the role of the resident, but when asked how one responds to direct inquiries from patients, only 20% of surgeons identified with giving a specific, explicit explanation.
- Most (64%) otolaryngologists felt it was beneficial to inform patients of the role of residents in their surgical care, but less than half routinely inform patients of that role.
 - Several possible reasons for this disconnect:
 - Amount of time required for adequate discussion
 - Implied consent
 - Informed consent is obtained in clinic and I "often don't know which resident(s) will be with me prior to the case."
 - "Residents have varying levels of responsibility in the OR, depending on the patient, complexity, and...skill level."
 - Contrary to the literature, some respondents felt that "...patients at a teaching hospital understand that residents will...participate."
- Beginning in clinic, and continuing through postoperative follow-up, there is opportunity for otolaryngologists to better align practice with opinion by improving the method of informing patients of the role of the resident in surgery.

CONCLUSIONS

- Otolaryngologists offer more autonomy to residents in the operative setting than surgeons in other specialties.
- There is a divide between the opinions and practices of explicitly informing patients of the level of resident involvement in surgical care.
- There are many reasons/barriers that could possibly account for this divide.
- Future studies will attempt to examine:
 - Does resident involvement in surgery change outcomes?
 - How do/should residents respond to the question, "will you be doing my surgery?"
 - How much information do patients want/need to know regarding resident involvement in surgery?

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