

Title: OB ANESTHESIA TEACHING IN U.S. ANESTHESIA RESIDENCIES

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Introduction

Obstetric anesthesia is one of the varieties of anesthesia care which an anesthetic generalist can be expected to provide, yet many anesthesiologists in practice seem to have had little specific teaching about obstetric anesthesia. We found no published information which addressed the question of how obstetric anesthesia is taught to U.S. residents today, although McMorland has recently surveyed obstetric anesthesia teaching in Canada and found it deficient.

Methods

We attempted to assess the current status of obstetric anesthesia teaching in United States anesthesiology residencies by mailing to the director of each AMA-approved anesthesia residency a 2-page questionnaire with prepaid return envelope. Of 153 questionnaires distributed, 108 (71%) have been returned from institutions responsible for more than 2208 residents in training.

The questionnaires contained 30 multi-part questions intended to produce information on how anesthesia residents were taught obstetric anesthesia, by whom, and for how long. We also attempted to elicit information on how the obstetric anesthesia rotation, if any, is run; how faculty members cover the service; how the obstetric service provides care; who provides the anesthetic care; what types of anesthesia are provided in obstetrics; who performs and teaches infant resuscitation; who cares for seriously ill obstetric patients, and where; whether programs offer fellowships in obstetric anesthesia, and how fellowship time is spent.

Results

Table I shows that 93% of residents in responding programs learn obstetric anesthesia on a specific rotation with an identified director. OB anesthesia rotations averaged just under two months long, about the same as cardiac anesthesia rotations. In most rotations an anesthesiologist was present at all times on the obstetric floor, and the majority made some form of daily OB rounds. Half the residents on OB rotations were covered by faculty who were in the hospital at all times.

Table II indicates that anesthesiologists performed 83% of the obstetric anesthesia in responding institutions, while supervised CRNA's performed 11%. The remaining 6% was performed by unsupervised residents, obstetricians, student nurse anesthetists and medical students. Regional anesthesia for cesarean section has eclipsed general anesthesia, though 23 institutions still

reported 50% or more general anesthesia for section.

The pediatric service was usually responsible for newborn resuscitation. Anesthesiologists in most programs participated in obstetric intensive care, usually on the regular OB floor.

Although more than half the programs were able to offer an OB anesthesia fellowship, only 34% had actually had any fellows in the last ten years. At least 163 OB anesthesia fellows were trained during the last decade. Of these, 61 (37%) were reported still in academic medicine. Numbers of fellows per program were as follows:

20-30 fellows	1 program
10-20 fellows	3 programs
6-10 fellows	2 programs
2-5 fellows	18 programs
1 fellow	7 programs

Discussion and Conclusion

As a clinical subspecialty, OB anesthesia has developed in the U.S. to the point that the majority of anesthesiologists currently in training are being exposed to an organized learning experience in OB anesthesia. As an academic discipline, it is less well developed: only a few residency programs have educated a significant number of fellows in OB anesthesia.

TABLE I

	% responding programs	% residents in training
OB anesthesia rotation	91%	96%
Director OB anesthesia	86%	93%
OB fellowship offered	49%	55%
OB fellows last 10 years	34%	41%
Anesthesiologist always present	83%	87%
In-hospital faculty call	47%	50%

TABLE II

OB anesthesia by anesthesia faculty	16%	>83% M.D.
anesthesia resident	67%	
anesthesia CRNA	11%	
other	6%	
Anesthesia for C/S		>66% regional
Spinal	18%	
Epidural	48%	
General	34%	

1) McMorland GH, Jenkins LC: A survey of obstetrical anaesthesia practice, teaching, and research in Canadian University departments of anaesthesia. Canad Anaesth Soc J 27:417-420, 1980