Sexual Dreaming during Anesthesia

Early Case Histories (1849-1888) of the Phenomenon

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THE authors have encountered the problem of sexual ideations or dreams in sedated or anesthetized patients in their own anesthesia practices, in reports from colleagues, through expert witness testimony, and in the review of contemporary civil and criminal proceedings.¹ A recent review article examined the roles of the benzodiazepines (especially midazolam), propofol, and nitrous oxide in producing sexually related dreams during dental analgesia and surgical analgesia and anesthesia.² Soon after the introduction of midazolam into clinical practice, The Lancet published two medicolegal editorials reviewing its association with sexual ideations.^{3,4} Even allegations of sexual abuse can occur from patients who have been sedated in intensive care units.^{5,6} These allegations are truly believed by the patient to be real; however, in many of these allegations, it would be impossible for a sexual assault to have occurred because of the proximity of other healthcare personnel and family members. As part of our studies, we were led to the historical aspects of this phenomenon, first reported in The Lancet in 1849.^{7,8} We found these historical case histories to be of note because they illustrate that within 3 yr of the public demonstration of ether anesthesia in Boston, practitioners recognized the potential for general anesthetics to produce dreaming and identified the need for a chaperone during anesthesia.

In this historical review, we focus on dreams and hallucinations with the earliest anesthetics, ether and chloroform. However, it is well recognized that drugassisted sexual abuse is still today a true entity and a gross violation of ethical principles. 9,10

The first reported case of alleged sexual abuse during anesthesia occurred in Paris, France, in 1847. This was less than 1 yr after the first public demonstration of ether anesthesia in Boston, Massachusetts, on October 16, 1846. A Parisian dentist was accused of using ether to assist in sexually assaulting two girls on successive

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days. 11 A physical examination performed by a physician and supporting evidence presented in court indicated that the first girl truly may have been assaulted. Also, she stated that she recalled specific aspects of the alleged assault. The second girl was able to recall details of her assault, but at the time she felt that she was unable to resist because of the effects of the ether, stating that she "felt paralyzed, her limbs were heavy, and she was unable to fight off" the dentist. Quoting records of the proceedings found in the French medical journals Abeille Médicale and Gazette Médicale from 1847, Dr. Edward Hartshorne (Surgeon, Philadelphia, Pennsylvania, and Editor, The Medical Examiner; 1818-1886) stated that the court entertained the possibility that these accusations were an ether-induced dream. 11 So, it is apparent that dreams or hallucinations were already known to occur with ether. Despite the dentist's claims of innocence, the court determined that sexual assault had occurred, and he was convicted and sentenced to prison on October 30, 1847.

Less than 2 yr later, physicians were debating whether sexual dreaming could be a side effect of anesthesia. In January, 1849, a discussion of "Chloroform in Midwifery" occurred during a meeting of the Westminster Medical Society in England. One of the physicians, Dr. G. T. Gream (Obstetrician, Queen Charlotte's Lying-In Hospital, London, England) enumerated several reasons why he did not think that chloroform was appropriate for obstetric use, and in so doing, he "alluded to several cases in which women had, under the influence of chloroform, made use of obscene and disgusting language. This latter fact alone he considered sufficient to prevent the use of chloroform in English women." Later in this discussion, "Dr. Tanner mentioned a case of an operation in King's College Hospital on the vagina of a prostitute in which ether produced lascivious dreams. Dr. Henry Hancock [Surgeon, London, England; 1809-1880] had noticed this effect in some cases he had operated upon." In a subsequent issue of *The Lancet*, notes from the Medico-Chirurgical Society of Edinburgh of February 7, 1849, were published.⁸ Sir James Young Simpson (Obstetrician, Edinburgh, Scotland, developer of chloroform anesthesia, and President of the Royal College of Physicians in 1849; 1811-1870) stated that after 15 months of use in thousands of cases, "he had never seen, nor had he ever heard of any other person having seen, any manifestation of sexual excitement result from the exhibition of chloroform. . . . The excitement, he was

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inclined to think, existed not in the individuals anesthetized, but was the result of impressions harbored in the minds of the practitioners, not in the minds of the chloroformed." However, contrasting comments followed:

After inhaling ether during her confinement in the Maternité, one Parisian prostitute, under the care of Professor Dubois, stated that she had had lascivious dreams. But rarely it was, to say the least, very unbecoming to say that most English ladies should have sexual dreams (like one French prostitute) when under the influence of chloroform, as Mr. Gream wished to prove. Such attempts as these to vilify the practice of inducing anesthesia were now urged too late to have any effect upon the progress of the practice.⁸

A brief account of this discussion was also reported in the *Monthly Journal of Medical Science*:

Mr. Miller thought that these unpleasant manifestations were most frequent among patients from the lower classes, addicted to the abuse of ardent spirits; and that they might often be prevented by inducing sleep rapidly, and without unnecessarily agitating the patient by noise, motion, or surgical examination, while administering the chloroform.¹²

What is readily apparent from these accounts is that within 3 or 4 yr of its introduction, inhalation analgesia and anesthesia were well recognized to cause sexual dreams or ideations. The refined sensibilities and decorum of certain English physicians might be contravened by the use of these drugs, as previously noted, but the stopper was out of the chloroform bottle, and the use of chloroform and ether rapidly achieved widespread use and ardent support. These concerns did not prevent Dr. John Snow (Physician and Surgeon, London, England; 1813–1858) from administering chloroform for obstetric analgesia to Queen Victoria when she gave birth to Prince Leopold on April 7, 1853.

Concern about sexual dreaming with anesthesia also occurred in America, where in 1854 a Philadelphia dentist, Dr. Stephen T. Beale, was accused of sexually assaulting a young woman while administering ether for a dental extraction. 11 A remarkably detailed and explicit report of the case appeared in a prominent American medical journal of the time. The accuser, a young woman engaged to be married, was accompanied by her fiancé. The latter soon left after they arrived at the dentist's office. Dr. Beale had treated the accuser's family for many years and had administered ether to her on several occasions for dental procedures. As Dr. Beale began to work on the tooth, the severe pain prompted her to request that ether again be administered. As she stated at trial, she inhaled ether that was placed on a small, folded napkin. She then recalled feeling dizzy and

closing her eyes, but never losing consciousness. Next, she alleged that she was sexually assaulted in the dental chair and described the events in detail. She stated that "all this time I was conscious of everything that was going on," but she was incapacitated and could neither cry out nor resist, even though she felt pain with the event. She testified that her eves remained closed and that she did not see any of the events that she alleged to occur. She remembered that several minutes elapsed from the time of the alleged sexual assault to when the dentist talked with her further about the needed dental work. The dentist then administered more ether and pulled out the decayed tooth, producing pain that caused her to scream. He then helped her to a rocking chair where she recuperated, and the dentist's next patient was brought into the same room. The accuser remembers this second patient commenting about the scream associated with the pain and the dentist replying that ether seemed to have had little effect on the accuser. After scheduling a return appointment, the patient was accompanied to the door by the dentist as she left his office.

The alleged event occurred between 10 AM and 11 AM, after which the young woman had a leisurely day of social activities, getting ice cream, going to tea, and horseback riding with friends. She first mentioned the alleged event to an acquaintance during afternoon tea several hours later, and other social activities occurred before and after this confession. She started her menstrual period a few hours after the alleged assault, a fact used by the defense to explain her pelvic pain that occurred when she received ether. The official complaint to the authorities occurred 3 days later.

The dentist vigorously denied the accusations of sexual impropriety. As part of the defense, "evidence of good character was abundantly presented" on behalf of the dentist. Also, "the peculiarly exposed position of the operating chair and the liability to frequent sudden interruption, were fully shown." During the trial it was shown that workmen and another female patient were nearby. This other female patient testified to "the apparent calmness" of both the dentist and the accuser as she was leaving, apparently indicating that no untoward event had occurred. She stated that "I did not perceive anything peculiar in the appearance of this young lady." The defense also presented several witnesses who saw the young woman shortly after the alleged event, all of whom "testif[ied] to the absence of anything remarkable in her manner or appearance." Finally, "the evidence for the defense then closed, with a long succession of statements by different dentists and their patients, and by physicians, together with a number of citations of printed cases and authorities; all of which went to illustrate the peculiar effects of ether inhalation in producing hallucinations or illusions, and to describe its usual action on the consciousness and will, and powers of locomotion."

The prosecution rebutted, and "three witnesses were introduced to prove that ether sometimes prostrates the muscular powers without interfering with the consciousness." The prosecution closed with statements from the accuser's physician, but he had not been called to see the patient until several days after the alleged event, and he never performed a physical examination. No physical evidence or report thereof was presented showing that an assault had occurred.

The dentist was found guilty and sentenced to prison for 4½ yr. However, he was soon pardoned by the "Executive of the State, in consequence of the large mass of testimony presented by physicians and dentists, going to prove the entire possibility that the whole accusation grew out of a hallucination such as ether is competent to produce." His pardon was assisted by the publication of a 30-page booklet that described alleged inappropriate behavior by some of the jurors during their deliberations; letters of support from many physicians and dentists; legal opinions from judges, including the Chief Justice of the Supreme Court of Pennsylvania; letters from Dr. Beale and his wife; personal visits with the governor by his friends and advocates; and other supporting statements. 14

The conviction of this dentist caused an outcry in the dental and in the medical and surgical community in the United States. The lack of corroborating evidence, the nearness of workmen and the next patient, and the delay in reporting the alleged event all contributed to questions about the accusations. Numerous opinions were expressed in medical journals and medical jurisprudence textbooks, uniformly questioning the legal competence of a person subjected to ether or chloroform. ^{11,15-18} As the *Boston Medical and Surgical Journal* stated,

It is our decided opinion, that the evidence of even a partially etherized person should not be received as valid, without corroboration. We believe that such persons are totally incapable of making a correct statement of what transpires during the time they are under the influence of the ether . . . [italics original]. ¹⁵

Dr. Moreton Stillé (Lecturer on the Principles and Practice of Medicine in the Philadelphia Association for Medical Instruction; 1822-1855), a physician prominent in the realm of American medical jurisprudence, discussed the topic of altered sensations during the use of chloroform and ether. ^{17,18} He detailed the reports of dreams and hallucinations during analgesia and anesthesia that other physicians had published. Most of these dreams were of happy times or pleasant places, but occasionally dreams were unpleasant. He recognized that they could contain sexual ideations, and referring to two 1847 German reports, he stated, "Siebold relates the case of a

woman whom he rendered insensible by ether; upon regaining her consciousness, she appeared to be in a highly excited state, and was loud in her praises of the delightful condition in which she had been, her eyes sparkled and a certain erotic excitation was very observable" (Uber die Anwendung der Schwefel—Aether—Dämpfe in der Geburtshülfe, Göttingen, 1847) and "Pitha observed excitement of the sexual feelings in two cases, one of a woman and the other of a man upon whom he operated" (Praeger viertel jahrschrift, 1847, Bd. 3). "In one of the cases observed by M. Dubois, the woman drew an attendant towards her to kiss, as she was lapsing into insensibility, and this woman afterwards confessed to dreaming of coitus with her husband while she lay etherized." "

Quoting a French source, Stillé wrote,

A female rendered insensible by ether, after some unintelligible phrases, related some most circumstantial details of her private life. This involuntary confidence, which might have been followed by serious consequences, had it taken place anywhere but in an hospital, was discovered afterwards to have been perfectly true. (Ann. Médico-psycholog. vol. xii. 376)¹⁷

An additional published case occurred in Montreal, Quebec, in 1858, where a dentist was accused of attempted rape while using chloroform during a dental procedure.¹⁹ The husband of another patient testified that his wife also thought she had been assaulted by the dentist, but the husband was present for the entire procedure and no assault had occurred. Yet, the court found the dentist "guilty of an attempt to commit rape, with recommendation to mercy."¹⁹ Therefore, by the late 1850s, the concept that ether and chloroform could produce sexually related dreams and ideations was well known in Europe, Britain, and America.

Stillé also described how patients who were having unpleasant dreams would often fight against the dentist or surgeon.¹⁷ In several of the cases of sexual assault that had been described, the accusers stated that they were unable to move their arms and legs and thus defend themselves or fight off their assailant. Yet they remembered the events in vivid detail. Stillé opined that a person who was experiencing such an unpleasant event would at least attempt to oppose it, especially if she was able to describe it in detail at a later time. If patients could not resist against their attacker, they should not be able to remember the event in detail. Stillé and much of the medical community believed that ether and chloroform were able to produce dreams and illusions that the patient truly thought to be real, but that the legal system should receive these reports with proper suspicion.

Stillé stated six points about ether (or chloroform) and its effect on the consciousness and motor function. Three of these are pertinent to this discussion:

- 4th. That voluntary muscular movement is not paralyzed until the state of perfect narcotism is produced, at which time, however, all outward consciousness is extinct.
- 5th. That the memory of what has passed during the state of etherization is either of events wholly unreal, or of real occurrences perverted from their actual nature.
- 6th. That there is reason to believe that the impression left by the dreams occasioned by ether, may remain permanently fixed in the memory with all the vividness of real events.¹⁷

The Lancet in 1874 published two articles about alleged sexual assault and anesthesia. 20,21 The second article described three cases where the physician or dentist was improperly accused of sexual assault, and all three cases were dismissed. Of significance, in the second case, a woman was receiving chloroform for analgesia during childbirth. Although her husband was with her at the time, she believed that her physician had assaulted her. In the third case, a woman thought she had been assaulted while receiving chloroform for a dental extraction. Her friends were immediately available in an adjoining room, and when they were brought into the room, she "confessed that she had had the peculiar hallucinations just alluded to," which were apparently sexual in nature. These cases produced this admonition: "Surgeons should endeavor to have witnesses whenever ether or chloroform is administered to women."20

The method of administering ether or chloroform was described in only one report, where it was stated that ether was administered "on a small napkin, folded up." ¹¹ Therefore, it is difficult to speculate on the inhaled concentrations of ether and chloroform and on the stages or planes of analgesia and anesthesia in these cases. In his 1937 classic description of the four stages of ether anesthesia, Dr. Arthur Guedel (Clinical Professor of Surgery, Anesthesia, University of Southern California School of Medicine, Los Angeles, California; 1883–1956) stated that stage 1 was characterized by analgesia and loss of consciousness, stage 2 was characterized by struggling and delirium, stage 3 was characterized by surgical anesthesia, and stage 4 was characterized by irregular breathing and respiratory paralysis.²² Just as Guedel divided stage 3 into four planes of surgical anesthesia, Dr. Joseph Artusio, Jr. (Professor Emeritus and Chair Emeritus, Department of Anesthesiology, New York Hospital and Cornell University, Ithaca, New York; 1917-), described three planes of stage 1: preanalgesia-preamnesia, partial analgesia-total amnesia, and total analgesiatotal amnesia. 23 These stages and planes are not absolute. However, it seems reasonable to conclude that most, if not all, of these patients were probably in planes 1 and 2 of the first stage of analgesia.

Two recent studies confirmed many other studies that dreaming of various scenes is a frequent event during anesthesia, occurring in as many as 22% of patients if questioned immediately after anesthesia emergence. ^{24,25} The dreaming patients tended to be younger and healthier, ^{24,25} and dreaming was thought to occur during anesthesia recovery. ²⁵ In most of these studies, women more commonly had dreams when compared with men, and the reported dreams that were related to sex were infrequent. ^{24,25} These studies seem to confirm the observations of the physicians and dentists of the mid-1800s, although the anesthetics are completely different.

Although this article has described historical aspects of this phenomenon, many drugs in current use, such as nitrous oxide, ^{26,27} benzodiazepines, ^{28,29} and propofol, ^{30,31} have been implicated in reproducing these types of dreams. All but one of the historical reports in this article has been of women; likewise, this same phenomenon has been observed less commonly in men using current anesthetics and sedatives. ^{2,5,32} The sex of the physician, dentist, or nurse does not protect him or her against allegations of malfeasance. ^{2,32} Just as in these cases of women just discussed, men may have dreams about their female anesthetist, ³³ and recovery room nurses may be accused of sexual misconduct. ³²

As Dr. Dudley W. Buxton (member of the Royal College of Physicians and Member of the Royal College of Surgeons of England; 1855–1931) stated more than 100 yr ago, "no administrator of an anesthetic is safe from having such a charge preferred against him, and if he and his supposed victim are alone, it is simply a case of word against word."³⁴ This admonition continues to be prudent for those who administer anesthetics or intravenous sedatives and for all postanesthesia care unit personnel: It is mandatory to have a third party in the immediate vicinity.

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