Office-Based Plastic Surgery

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ABSTRACT

Office-based plastic surgery began in the 1960s and has expanded exponentially since then. The majority of plastic surgeons now have their own office-based facilities, and every elective aesthetic procedure from hair transplantation to abdominoplasty and breast reduction can be done as an outpatient procedure with tremendous increases in efficiency, safety, and time. We started with a single room and have expanded to three operating rooms, two specific preoperative, postoperative private rooms, and a two-bedroom, curtained recovery area. Although the capital expenditure is high, the rewards in time, efficiency, and safety are great.

KEYWORDS: Outpatient, office-based plastic surgery, sedation

BACKGROUND

Office-based plastic surgery has enjoyed a tremendous expansion over the past several years. It was in the mid-1960s when Dr. Ford and others started the first freestanding outpatient surgical facility in Phoenix, right across the street from St. Joseph's Hospital. It was very successful because it was run by anesthesiologists who could avoid any cross-specialty or other competitive restrictions by being somewhat neutral by providing surgery facilities and, of course, anesthesia services to a wide range of specialties. It was criticized in the beginning especially by hospitals and most organized medicine. As their statistics grew and they could prove the safety and efficiency of outpatient surgery, it became more popular.

By the 1980s, insurance companies were recognizing outpatient surgery as a cost-effective option. By the beginning of this century, it is the preferred setting for many surgical procedures, even required by some insurance plans. Office-based surgery, of course, is a microcosm of the freestanding surgical facility. It is not nearly as efficient as the freestanding multi-doctor surgical facility because it is not likely to be scheduled as intensely. However, it offers the operating surgeon

tremendous convenience and efficiency. Office-based surgery can be very expensive. It requires substantial capital expenditure for equipment, facility, personnel, and management. We are certified by the American Association for Accreditation of Ambulatory Surgery Facilities (AAAASF) and members of the Texas Hospital Association.

PHYSICAL REQUIREMENTS

The physical requirements can be as small as 1000 sq ft, and a single room can be dedicated as a surgical suite. An exam room or two can be specified as the preoperative and postoperative areas. Of course, there is no limit to the maximum size of the office-based surgery facility. The advantages of a physician having his own office-based surgery center are described in the following.

Time

Patients can be seen before surgery, between cases, and after surgery with no loss of time. When operating at a remote site, it's necessary to drive somewhere, park, and change clothes to go from one facility, to the

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office, to the operating facility. An office-based situation allows parking once in the morning and leaving in the evening with all the in-between time being used. In addition, the patient's time is treated with the highest respect. We have all been "bumped" when operating at the major hospitals because a tragic injury had preempted the operating rooms or a previous case had gone on far too long or the hospital had had personal problems and the facility is not properly staffed.

I recently scheduled a small debridement case, following a large abdominoplasty, at our local 500-bed hospital. It was put on the "to follow" for the first available room at 3 PM. Of course, I was there at 2:30 PM dressed and ready. All the rooms were on overtime and several teams had to have a shift change. A perirectal abscess then was placed ahead of us. At ~7 PM, a hand infection was deemed more "critical" than a necrotic patch of abdominal skin and vacuum assisted closure (VAC) installation. The (orthopedic) hand surgeon had a hospital-based practice and had planned and financed a large office building across the street. He may have had other alliances or political "pull." Nevertheless, his later request was honored ahead of mine. I recently received a 25-year "special partner" plaque from that institution so it is not as though I am a stranger there.

Delays never happen in office-based plastic surgery facilities. The priority is the surgeon and not others, so that scheduling can be very precise and there are no other priorities.

However, the expenses can be quite burdensome. The entire staff must be constantly available with backup, and when the surgeons take a vacation or go to a meeting the staff still must be employed, whereas when operating at a hospital or outpatient surgery center, there is no continuing expense when we are not there. We simply pay on a per case basis.

Physical Plan

We have developed three office-based surgery facilities over the years, increasing in size and complexity with each one. Several advantages came from this evolution. The first office was 1200 sq ft previously operated by a plastic surgeon; it had a small procedure room. At this facility, I began using Valium[®] and ketamine dissociative sedation and was able to do hair transplants, blepharoplasties, and small hand procedures on a regular basis.¹ We soon outgrew our space and moved to another building of ~2500 sq ft. There, I was able to design a specific operating room.

It has several convenient innovations. One is lighting. Instead of having a \$25,000 fishbowl in the ceiling that doesn't provide the task lighting needed for surgery, we built a translucent cove directly over the operating table (Fig. 1). This consists of fluorescent lights, all with separate switches so that we can regulate the lighting to come from behind the surgeon so that no light comes into his eyes directly. This can provide as much as 10,000 ft-candles (equal to sunlight in Phoenix at high noon) diffused throughout the entire surgical surface. This is generally shadow-free light, because it comes from all directions and is generally aimed at the operating site. Task lighting is provided by a small battery-operated headlight provided by Graham's Medical coaxial light (Fig. 1B) between the eyes so that breast augmentations and other cavity surgeries can easily be accomplished. One benefit to the lighting is when television programs are filming in the operating room; they don't have hot spots from the fishbowl lights. The whole room is illuminated with color corrective (5300 K) fluorescents.

A mobile intravenous (IV) rack is installed in the ceiling between the lights so that there is no extra IV pole on the floor. It moves from head to toe as might be convenient. Further, this lighting system allows heat lamps to be placed in the center of the operating area,

Figures 1 (A,B) Cove lighting is individually switched so we can avoid any light in the surgeon's eyes. It will all come from the surround. Task lighting, as into a nostril or breast pocket, is provided by a coaxial beam (head light gram medical). The recessed central lights are infrared heat lamps switched to a timer. The heat lamps are on a timer so they are not inadvertently left on during recovery.

so that if a patient is cold when being prepped, the room does not have to be heated. We simply turn on heat lamps, so that the patient alone is heated. We put the heat lamps on a timer so they are not inadvertently left on during recovery.

The new facility's size, shape, and configuration were up to us. This enabled us to put passthrough cabinets on two walls of the operating room with sliding glass doors on both sides so that the sterile equipment could be stocked without entering the operating room.

Air Circulation

In this facility, we engineered a specific air-handling system for heating and cooling that was all positive pressure. In addition to the usual mechanical high-efficiency particle air (HEPA) filtration system, we added a static electronic filter that removes even submicrometer virus particles. The air then passes over an ultraviolet light at 259 Å, which will sterilize any particle that could possibly go floating into the room. To the extent it is physically possible, all of the air in the room is particle free and sterile. An air return from the operating room was left in the hallway, so that the sterile air is under positive pressure in the operating room. Thus, when we open the passthrough cabinets, for instance, sterile air comes flowing out through the cabinets. When the door to the operating room is open, sterile air comes out and we avoid entrance of any dust.

Our third facility is ~7000 sq ft, and half of it we designed ourselves. In this one, we put two operating rooms side by side and two preoperative recovery rooms exactly opposite them across the hall (Figs. 2, 3).

We were unable to include the passthrough cabinets in this configuration but were able to place our autoclave a few feet from the hallway and a sink and

cleaning area at the other end of the hallway (see Fig. 3) so that our instruments are not traveling to another floor or far away. They stay right within the operative area. Because our preoperative and postoperative rooms are just opposite the operating room, we had extra soundproofing added to these rooms by putting fiberglass insulation within the studs on all interior walls (including the wall between the two rooms) and then adding an extra layer of the heaviest sheetrock over the usual 3/8-in. sheetrock. The doors were then ordered as solid-core doors. An effort was made to baffle the ceiling to minimize sound transmission through the air-conditioning system. The sound suppression is not perfect; therefore, we play different music in each operating room. The doctors prefer Wagner's *Ride of the Valkyries*. The staff likes country and western. This way, the ambient noise is somewhat canceled. We also have a television in each of the preoperative recovery rooms, and we keep these on at all times so that they will create more white noise and minimize any operative sounds. This is an important consideration. A preoperative patient does not want to hear a moan, a groan, or any extraneous staff conversation.

Infections

We are able to schedule only clean cases at our facility. If we have a suspected contaminated case, such as the debridement mentioned above, we schedule it at the local hospital or outpatient surgery facility to minimize any possible cross-contamination. In addition, we test all of our staff and patients for AIDS and hepatitis (Fig. 4). If AIDS or hepatitis is discovered, we schedule those at the hospital operating room. We do not do those cases here under any circumstance. We have been performing preoperative AIDS testing on all of our patients since

Figure 2 Our perioperative room is located directly across from our operating room.

PERSONIQUE

Personal Surgery Center
630 W. 34th Street, Suite 201
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To: All Our Patients

Re: AIDS Testing

In addition to the pre-operative history and physical which we normally require for all patients who are having elective surgery, all of our surgical patients will be tested for AIDS (acquired immune deficiency syndrome) antibodies. This is an inexpensive test that is done at Clinical Pathology Laboratories after your initial consultation.

In that there is, at this time, no curative treatment for AIDS, it is essential that every precaution be taken for our patients and surgical personnel.

If it should occur that you have a positive HIV screening test, then your elective surgery will be canceled and additional testing done, at your cost, to confirm or deny the presence of HIV. It should be noted that all information regarding positive tests would be, within the confines of public health rule and regulations, kept confidential.

Your signature below will confirm awareness of, and agreement to proceed with the testing.

Signature	Witness
Print Name	Print Name
Date	Date

Figure 4 AIDS statement.

8. Complete control for television and filming for educational and publicity purposes.
9. Freedom for visiting professors: Having your own facility allows you to have guests in the operating room if you think it is appropriate, whereas most hospital facilities will not allow unlicensed visitors who do not have hospital privileges under any circumstances.
10. Temperature control: Each room can have its own heating and air-conditioning system, independent of the building, the office, or other rooms.
11. Freedom from organized labor: Unions are taking over nurse function in hospitals. We are able to pay our help based on performance with substantial bonuses that are not subjected to someone else's rules.

DISCUSSION

I have had my own office-based surgical facility since 1980. It has gradually evolved from a single, small procedure room to a full-fledged outpatient surgical facility dedicated solely to our practice of plastic surgery. We have as many as five physicians working here in

various capacities. While our costs for operating may be substantially higher than a hospital or other outpatient facility because we are unable to utilize the facility 12 or 24 hours per day, the convenience and efficiency of our physicians' and patients' time has been well worth it.

Recommendations

We wholeheartedly recommend individually owned and operated office-based facilities for established plastic and reconstructive surgeons. This is not an expenditure to take lightly. No one should start practice initially owning their own office-based surgery facility. The overhead is so high that it would be a burden to anyone attempting to start a practice without a dependable base of patients. Once some critical mass is met where one is doing at least an average of one case per day, the efficiencies may be worth the cost of capital, equipment, and personnel.

Floor Plan

Our office floor plan is on the second floor of an office condominium building a few blocks from two of the

Figure 5 Combination locks on our outside doors and into our suites assure us that only certain people have the combination. When we fire someone, we are able to quickly and quietly change the combination before we show the door, and we do not have to worry about having a copy of the keys.

major hospitals in town. We have a 16-camera security system that records 24/7 and is motion activated. Through the years, we have had several instances where we needed it. Once, a truck ran right through our parking lot wall. One morning a patient stole plants that were just put in the parking lot perimeter. Another time, a burglar came into the main entrance (Fig. 5). Recording these kind of events gives us an opportunity

to find the culprits. Apparently, it does not discourage them all.

In the hallway, we have a series of before-and-after patient pictures with a brief explanation describing what was transformed (Fig. 6).

In Figure 3, No. 1 is our reception area, which contains a 42-in. plasma TV that alternates our programs, which include various shows that we have been on through the years and several procedures and explanations that we have made ourselves. We have an Edutainer-Alternator that alternates Fox News with our own program every 5 minutes. This way, patients are not bored by our “commercial” running all day. It appears that we are on national television every few minutes, and our 3 hours of tape does not repeat for 6 hours. That is longer than anyone will be here. The reception area has room for seven people, but it is always our goal to get them moving promptly. It is decorated with antiques. The floors are parquet in walnut or cherry with wall-to-wall vinyl in the various exam rooms. The patients come in the entrance and can see right into the passthrough sliding glass window to our reception area where they will be directed to fill out our new patient entrance form.

No. 2 is the reception area, which has room for two employees who staff the computers, the scheduling, and keep track of the various charts, which are located in no. 15, right around the corner, but covered and remote from view. This complies with HIPPA rules.

No. 3 contains two small chairs where a patient and their loved one can sit at a desk, discuss finances, and will have privacy from the reception area. In the corner, where it cannot be seen by anyone else, is our screen

Figure 6 Since we own the building, we are able to present a series of before and after pictures of everything we do.

Figures 7 (A,B) We have an automatic, remote controlled door between my office and the operating room.

video monitor system (no. 16), which includes each of the preoperative and recovery rooms (no. 12), each of the hallways, parking lot, and lobby.

We have two rooms dedicated to consultation (no. 4). These are tastefully outfitted with antiques and comfortable furniture with television sets where patients can view procedures and talk at length to our trained consultants. They contain a variety of before-and-after picture books and the necessary forms and computer terminals for accommodating a new patient.

There are the three exam rooms (no. 5) that contain the usual items, sink, mirror, and electric-powered exam chairs, and cabinets with supplies and instruments.

No. 6 is the doctor's office, which contains an electronically activated passthrough to the secretary desk (no. 7), and an electronically activated pass-through pocket door to the first operating room (no. 14) (Fig. 7). This also has a private bath (no. 10) and elaborate double doors that go to the hallway. These doors are solid cherry, hand-laid molding, and raised panels with Queen Anne style gold-plated hardware.

No. 8 is the lunch room for the staff.

No. 9 is a patient lavatory that has a fluted ionic column and Verdi green marble walls including one complete mirror wall. That gives you twice the marble at half the price and makes the room look bigger.

No. 11 is a storage area with cabinets floor to ceiling that contain most of the operating room materials, disposables, garments, and so forth. It also has a washer and dryer for our scrubs and uniforms. Each of the preoperative recovery rooms (no. 12) have a small observation window into the storage area (no. 11) because no. 11 is where the nurses and the OR technicians spend most of their time so that they are constantly in contact with these patients in no. 12, who also have a video and audio communication with the reception area.

The preoperative and postoperative recovery areas (no. 12) have their own television set to cable. We keep both of them tuned to a different station to create some white noise so that an occasional moan or groan or intraoperative conversation is not noticed. In addition, there are speakers in each of the hallways all playing different music at a low level to create more auditory camouflage. The staff plays country and western. The doctors prefer classical in the operating room.

No. 13 is a gray room where our instruments are returned after surgery. They are not going down the hallway or getting lost or moved around, but they go only to the gray room where they are initially washed and cleaned, and then, within the same hallway, go to the autoclave (no. 18). There is a counter under the storage cabinets (no. 19) where sterile packaging is performed. The instruments are then sterilized in the autoclave (no. 18) and stored in the cabinets above.

The operating room is no. 14; these are duplicates and have cabinets and work areas sufficient for tasks. Each of the operating rooms has a separate air-handling system with positive pressure in the operating room so that the filtered area goes out of the doors. First, there is a mechanical HEPA filter that removes most airborne material. Second, an electrostatic system charges the air and attaches even submicrometer particles. Third, an active ultraviolet beam at 259 Å sterilizes the ambient air. The walls have been reinforced for soundproofing.

No. 15 is the current chart storage area where a patient's records are readily available but discretely hidden.

REFERENCES

1. Ersek RA. Dissociative anesthesia for safety sake. ketamine and diazepam—a 35-year personal experience. *Plast Reconstr Surg* 2004;113:1955–1959