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The doctor's office is the best setting for most cutaneous procedures

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Abstract Although most dermatologic procedures are done in an office setting, some providers are performing them instead in ambulatory surgery centers (ASCs). This relocation of care comes with significantly higher expenses for patients and insurers. Compounding the issue of increased costs is the paucity of evidence demonstrating better outcomes associated with the use of ASCs. The most common cutaneous procedures have low complication rates when performed in an office setting and regular use of ASCs for these procedures is not justified.

Keywords: ambulatory surgery centers, dermatologic surgery, Mohs surgery, cost-effectiveness, safety

Introduction

Ambulatory surgery centers are facilities utilized for same-day surgical care that does not require hospitalization. These facilities were intended for surgeries that were traditionally performed in hospitals but could be safely performed on an outpatient basis [1]. By decreasing the utilization of inpatient surgical services, ASCs were expected to decrease health care costs. However, these facilities are increasingly being used for procedures that can be performed in an office setting, a change that increases costs for both insurers and patients [2].

Discussion

A commonly-made argument for the transition of care from outpatient offices to ASCs is increased safety. A perceived benefit of ASCs is the higher level

of care available. For example, anesthesiology services, sterile operating rooms, and perioperative monitoring are standard in ASCs. Logically, it would follow that the availability of these services would result in improved outcomes. However, the use of ASCs to improve the safety of dermatologic surgeries is fixing a problem that does not exist; the preponderance of evidence demonstrates that the most common cutaneous procedures have an exceedingly low complication rate when performed in an outpatient setting [3–8].

For example, a prospective study of cutaneous procedures done in an office-based setting, the majority of which were excisions and Mohs surgery, showed an infection rate and hemorrhage rate of 1.3% and 0.89%, respectively [8]. This study included patients sometimes considered too risky for office-based procedures, with forty-six percent of the patient population on one or more anticoagulant or antiplatelet medications. This, and other studies confirm that cutaneous procedures present a low risk even to traditionally high-risk patients.

Furthermore, evidence demonstrates that “high-risk” patients are not necessarily the ones who are receiving procedures in ASCs. A retrospective study comparing cutaneous procedures done on Medicare recipients between 1992 and 2000 showed no difference in the Charlson Comorbidity Index (a measure of patients’ health status) among patients treated in offices, ASCs, and hospital-based operating rooms [2]. This indicates that treatment location was largely based on provider preferences, rather than concerns about patient comorbidities. The shifting of low-risk cutaneous procedures from

offices to ASCs has been largely unrelated to patient safety and represents an unnecessary escalation of care.

Another perceived advantage of ASCs is the availability of anesthesiology services. In this setting, patients can receive nerve blocks and systemic anesthesia, options that are usually absent at a dermatologist office. However, topical and local infiltrative anesthetics are generally accepted as standard of care for common dermatologic procedures [9]. Nerve blocks have been shown to increase pain control for procedures like botulinum toxin injections and photodynamic therapy [10, 11], but this hardly justifies the widespread relocation of dermatologic procedures to the ASC setting. The pain management options available in doctors' offices are adequate for most dermatologic patients and procedures.

There is no evidence available that procedures performed in ASCs have better outcomes than those performed in doctors' offices. Compounding this issue is the higher cost associated with the use of ASCs. Although Medicare and other insurance providers offer a smaller reimbursement for the same procedure performed at an ASC versus an office, this reduced payment is offset by the facility fee associated with ASC-based procedures. Consequently, the average cost to Medicare for common cutaneous procedures increases by 22 to 113% when performed at an ASC versus a physician's office [2].

The majority of physicians performing cutaneous operations in ASCs are not, in fact, dermatologists. In a study looking at minor cutaneous procedures (defined as skin excisions, intermediate repairs, complex repairs, skin flaps, and skin grafts) performed on Medicare recipients, a physician's office was the setting for 98.4% of procedures done by dermatologists. Plastic surgeons and general surgeons, on the other hand, performed minor cutaneous procedures in an office only 36.4% and 47.1% of the time, respectively [2]. This may be driven by the convenience of performing cutaneous procedures in the same setting as the surgeon's other operations. Furthermore, surgeons who have

ownership of ASCs are incentivized financially to operate at this location.

The 1.6% of procedures done by dermatologists in a non-office setting represented 123,548 procedures [2]. Although this figure paled in comparison to the 1.9 million and 1.7 million done outside the office setting by plastic surgeons and general surgeons, respectively, the additional expense associated with these procedures is significant and largely avoidable. Additionally, although dermatologists appear to perform most procedures in an office setting, it is unknown what overall impact dermatologists have, as they may refer procedures to plastic surgeons, who then utilize an ASC for the surgery. For example, a patient's skin cancer may be treated with Mohs surgery in a dermatologist's office followed by reconstruction in an ASC the next day by a surgeon employed by the same practice. This generates additional revenue for the practice while creating an undue burden for the patient and the patient's insurer. Consequently, dermatologists may further contribute to the inappropriate shifting of procedures away from the office setting through referral.

Dermatologic procedures performed in an office are notably cost-effective. For example, Mohs surgery is less expensive than standard surgical excision, topical therapies, and radiation for the treatment of various types of skin cancer [12]. When providers inappropriately use ASCs for Mohs surgery and other dermatologic surgeries, this drives up costs for the system as a whole. As the practice of using ASCs for dermatologic procedures becomes more widespread, Medicare and other insurers are likely to cut reimbursement for these procedures across the board. Consequently, the temporary financial gain from operating in ASCs may result in long-term loss, including those who have performed their procedures in offices all along. Dermatologists, especially, need to take a stand against inappropriate use of ASCs, as the cut in reimbursement will affect them the most.

Conclusion

Ambulatory surgery centers were created as an alternative to hospital-based operating rooms, and

procedures that are commonly and safely performed in doctors' offices were explicitly excluded from ASC eligibility [1]. The decision to operate in an ASC should be made on a case-by-case basis in light of factors related to the individual patient and the

planned procedure. Wholesale transition of cutaneous surgeries from the physician's office to an ASC, on the other hand, represents an unnecessary and wasteful use of resources.

References

1. Medicare Program; Revised Payment System Policies for Services Furnished in Ambulatory Surgical Centers (ASCs) Beginning in CY 2008. [<https://www.federalregister.gov/documents/2007/08/02/07-3490/medicare-program-revised-payment-system-policies-for-services-furnished-in-ambulatory-surgical>]. Accessed on July 1, 2018.
2. Marks MM, Yelverton CB, Williford PM et al. A Medicare cost comparison of minor cutaneous procedures by surgical setting. *J Dermatol Treat*. 2010; 21(2):101–106. [PMID: 19459078].
3. Cook JL, Perone JB. A prospective evaluation of the incidence of complications associated with Mohs micrographic surgery. *Arch Dermatol*. 2003; 139(2):143–152. [PMID: 12588220].
4. Alam M, Ibrahim O, Nodzenski M et al. Adverse events associated with mohs micrographic surgery: multicenter prospective cohort study of 20,821 cases at 23 centers. *JAMA Dermatol*. 2013; 149(12):1378–1385. [PMID: 24080866].
5. Newlove T, Cook J. Safety of staged interpolation flaps after Mohs micrographic surgery in an outpatient setting: a single-center experience. *Dermatol Surg*. 2013; 39(11):1671–1682. [PMID: 24131288].
6. Starling J, Thosani MK, Coldiron BM. Determining the safety of office-based surgery: what 10 years of Florida data and 6 years of Alabama data reveal. *Dermatol Surg*. 2012; 38(2):171–177. [PMID: 22093178].
7. O'Neill JL, Lee YS, Solomon JA et al. Quantifying and characterizing adverse events in dermatologic surgery. *Dermatol Surg*. 2013; 39(6):872–878. [PMID: 23464822].
8. Bordeaux JS, Martires KJ, Goldberg D et al. Prospective evaluation of dermatologic surgery complications including patients on multiple antiplatelet and anticoagulant medications. *J Am Acad Dermatol*. 2011; 65(3):576–583. [PMID: 21782278].
9. Kouba DJ, LoPiccolo MC, Alam M et al. Guidelines for the use of local anesthesia in office-based dermatologic surgery. *J Am Acad Dermatol*. 2016; 74(6):1201–1219. [PMID: 26951939].
10. Hund M, Rickert S, Kinkelin I et al. Does wrist nerve block influence the result of botulinum toxin A treatment in palmar hyperhidrosis? *J Am Acad Dermatol*. 2004; 50(1):61–62. [PMID: 14699366].
11. Halldin CB, Paoli J, Sandberg C et al. Nerve blocks enable adequate pain relief during topical photodynamic therapy of field cancerization on the forehead and scalp. *Br J Dermatol*. 2009; 160(4):795–800. [PMID: 19210497].
12. Ravitskiy L, Brodland DG, Zitelli JA. Cost analysis: Mohs micrographic surgery. *Dermatol Surg*. 2012; 38(4):585–594. [PMID: 22443180].