RE: The use of lasers for hair removal.

INTRODUCTION

On April 25, 2000, Marie M. Jones, LE, President, Maryland Board of Electrology, petitioned the Board of Physician Quality Assurance (hereinafter BPQA) to issue a declaratory ruling on the delegation of laser hair removal devices, by physicians to non-physicians. In addition, Ms. Jones requested that the BPQA review the Board of Nursing Declaratory Ruling 97-1 "Registered Nurse Administration of a Treatment by Selective Laser in a Physician Office Practice Setting" and determine how it relates to the delegation of laser hair removal devices.

On May 24, 2000, the BPQA voted to proceed to issue a Declaratory Ruling for the use of lasers for hair removal. The BPQA delegated responsibility for consideration of the petition to the Practice of Medicine Committee (hereinafter POMC) to study the request and prepare a proposed ruling for the BPQA’s consideration. The POMC considered the petition and made a recommendation that the BPQA issue a declaratory ruling.

The BPQA is authorized to issue a declaratory ruling pursuant to State Government Article §§ 10-301 et seq. and Code of Maryland Regulations (hereinafter COMAR) 10.32.16 Petition for Declaratory Ruling.
RULING

The use of lasers for hair removal is a surgical act. Only physicians, certified nurse practitioners, registered nurses pursuant to Board of Nursing Declaratory Ruling 97-1, and physician assistants may use lasers for hair removal.

BACKGROUND

In 1997, the POMC reviewed POMC#97-007\textsuperscript{5} which involved the use of lasers for hair removal. The POMC opined in that letter that “the use of lasers is not a delegable act, but the POMC decided that they would revisit the issue. In 1998, the POMC reviewed POMC#98-007,\textsuperscript{6} which involved the question of who may use lasers in a physician’s office, including physicians, nurses, and technicians. The POMC again concluded that the use of lasers is a surgical act that cannot be delegated. The POMC requested that this issue come before the full BPQA. On March 25, 1998, the BPQA agreed that the use of lasers for hair removal is not a delegable act.

On May 27, 1998, the Physician Assistant Advisory Committee (hereinafter PAAC) requested that BPQA modify its stance on the use of lasers\textsuperscript{7}. The PAAC requested that physician assistants be allowed to use lasers for hair removal under an expanded job description with 100% on-site supervision. The BPQA voted to accept the PAAC’s request and modify its previous position. (Pursuant to House Bill 674 – Patient Prescription Access – Limited Physician Delegation to Physician Assistants (Chapter 655, 1999 Laws of Maryland, effective June 1, 1999), Delegation Agreements replaced Job Descriptions).

\textsuperscript{1} BPQA Petition for Declaratory Ruling by Md. Board of Electrologists, 4-25-00.
\textsuperscript{2} Md BOARD OF NURSING, Decl. Rul. 97-1, (Jan. 28, 1997).
\textsuperscript{3} Md Code Ann., State Gov. § 10-301 et seq.
\textsuperscript{4} Md. REGS. CODE, tit. 10, § 32.16 (1999).
\textsuperscript{5} BPQA Practice of Medicine Committee, Letter of Inquiry, 97-007, (Jan. 16, 1997).
\textsuperscript{6} BPQA Practice of Medicine Committee, Letter of Inquiry, 98-007, (Dec. 18, 1997).
On April 25, 2000, the Board of Electrology requested that the Board issue a declaratory ruling for the use of lasers for hair removal. The Board of Electrology requested that the BPQA review the Board of Nursing Declaratory Ruling 97-18 "Registered Nurse Administration of a Treatment by Selective Laser in A Physician Office Practice Setting" and determine how it relates to the delegation of laser hair removal devices.

On August 15, 2002, the POMC proposed that the Board adopt this Declaratory Ruling.

ANALYSIS

Laser (light amplification by stimulated emission of radiation) is defined by Dorland’s Illustrated Medical Dictionary⁹ as:

A device which transforms light of various frequencies into an extremely intense, small, and nearly nondivergent beam of monochromatic radiation in the visible region with all the waves in phase. Capable of mobilizing immense heat and power when focused at close range, it is used as a tool in surgical procedures, in diagnosis, and in physiologic studies.¹⁰

Recent advancements in the use of lasers in medicine led to the current use of lasers for hair removal. The possibility that lasers were effective for hair removal became apparent when surgeons using lasers for tattoo removal observed that the laser’s effects also rendered skin

---

⁷ BPQA Physician Assistant Advisory Committee, Meeting Minutes, (May 27, 1998).
¹⁰ Id at 902.
Several lasers and light sources have recently been developed for hair removal. These devices destroy the hair follicle based on the theory of selective photothermolysis.

In selective photothermolysis, the laser device targets the melanin within the hair and "using the proper combination of wavelength, energy, fluence and pulse duration" achieves "local thermal coagulation necrosis," which is basically destruction of the hair follicle. Destruction of the hair follicle by laser includes damage to the cells lining the follicle and may also include damage or destruction to the surrounding cells of the dermis and epidermis. Thus, the question of whether or not the use of lasers for hair removal is an "ablative procedure" arises. The Maryland Board of Nursing's Declaratory Ruling 97-1 defined "[a]blative surgical procedure" as "a surgical procedure designed to destroy or excise by use of a laser." Since the goal of the procedure is to destroy or damage the hair follicle, and in the light of the definition used in The Maryland Board of Nursing's Declaratory Ruling 97-1, it is clear that the use of lasers for hair removal is an ablative procedure.

The Board of Nursing articulated their belief that the administration of a treatment by selective laser is within the scope of practice of the registered nurse given specific circumstances. The Board of Nursing also supplied a list of parameters, which must be met

---

11 Tina S. Lister, **Manual of Cutaneous Laser Techniques**, 2nd ed., Lippincott Williams & Wilkins, Philadelphia, (2000). pp. 109-10. In the early 1990s, surgeons using a Quality Switched (QS) 694-nm ruby laser to treat tattoos observed that the irradiated skin was also rendered hairless. Preliminary studies in the mid-1990s confirmed the safety and efficacy of hair removal with a normal-mode or long-pulse (ns) ruby laser, and a new discipline was created. Id.


13 Id at 276.


15 Id at 3, (stating, "[t]he registered nurse may act on the physician's prescriptive order, only after the physician has assessed and evaluated the patient that day, immediately prior to the laser treatment being administered. It is not within the registered nurse's scope of practice to administer a laser treatment per protocol or written practice guidelines.")
before, during and after laser treatment by a nurse. These parameters included patient evaluation as well as educational and credentialing mechanisms for verifying the registered nurses abilities to perform laser hair removal.\textsuperscript{16} The Board of Nursing Declaratory ruling also included an obligation that the “nurse administering the selective laser treatment is required to have the same knowledge base regarding treatment and its effect, as with any other specialized treatment he or she would administer to any other patient in any other practice setting.”\textsuperscript{17} Since even the Board of Nursing ruled that the use of lasers for hair removal is an “ablative procedure,” the BPQA finds that registered nurses may use lasers for hair removal under the supervision of a physician.

The BPQA also relies on the American Medical Association (AMA) opinion on laser surgery for support. The AMA’s policy H-475.988 - Laser Surgery, states, “[t]he AMA supports the position that revision, destruction, incision or other structural alteration of human tissue using a laser is surgery.”\textsuperscript{18} The AMA has also adopted a policy that “laser surgery should be performed only by individuals licensed to practice medicine and surgery or by those categories of practitioners currently licensed by the state to perform surgical services.”\textsuperscript{19}

The AMA position is supported in medical literature and textbooks. Each describes laser hair removal as a “surgical procedure” requiring careful preparation and precise planning prior to treatment as well as continued monitoring throughout the entire procedure.\textsuperscript{20} The preoperative

\textsuperscript{16} Id at 3-5.
\textsuperscript{17} Id at 5.
considerations include among others, patients skin type, whether the patient has an active
cutaneous infection, a recent history of recurrent staphylococcal or herpes simplex infection, a
history of keloids or hypotrophic scarring, skin diseases such as vitiligo an psoriasis, or has taken
medications which may increase photosensitization or scarring. The techniques for performing
hair removal with lasers vary by device, but the sound medical principles of constant monitoring
and tailoring the application of treatment to each patient based upon pre-operative factors coupled
with response during and after the procedure, require that the device be operated only by a
licensed individual with the knowledge and skill to evaluate even the most subtle of changes in
patient response and the authority to change both the device settings and the treatment according
to patient needs. Physicians and nurse practitioners possess the necessary skills and knowledge to
use lasers in patient treatment under their accepted scope of practice.

Physician assistants on the other hand, may not necessarily possess the essential skills and
knowledge to use lasers in patient treatment and are not authorized to practice independent of a
supervising physician. They may, however, perform treatment functions which are delegated by a
physician under a delegation agreement approved by the BPQA. In order to be approved, the
physician assistant’s scope of practice must be limited to medical acts delegated by the supervising
physician which are appropriate to the education, training and experience of the physician
assistant and customary to the practice of the supervising physician. The BPQA’s approval of
the delegation agreement assures that physician assistants are supervised by physicians with

---

ART AND SCIENCE OF SELECTIVE PHOTOTHERMOLYSIS, Mosby, St. Louis, (1994); Mitchel P. Goldman, Richard E.
Fitzpatrick, et al., CUTANEOUS LASER SURGERY: THE ART AND SCIENCE OF SELECTIVE PHOTOTHERMOLYSIS,
SECOND EDITION, Mosby, St. Louis, (2000).
acceptable practice expertise and possess the requisite knowledge and training to safely perform the treatments delegated to them including laser hair removal.

CONCLUSION

The use of lasers for hair removal is a surgical act that may only be performed by physicians, certified nurse practitioners, registered nurses pursuant to Board of Nursing Declaratory Ruling 97-1, and physician assistants. The Board recognizes that the practice of medicine develops and evolves over time. The Board reviews and considers developments in the practice of medicine within the context of its duty to protect the public.

Samir R. Neimat, M.D., Chairman

10/30/02
Date

21 Id. at 276.
23 Id.