Occupational Therapy in Operating Room Emerging and Distinct Role in Collaborative Burn Care Practice: A case study

Allen Romero Espelita, OTD, OTR/L, C/NDT, CEAS I, CPAM

UNIVERSITY MEDICAL CENTER

Background:

Numerous health professions face challenges and opportunities resulting in increasing contexts for service delivery. For occupational therapy, one element of this changing landscape is the ongoing development and delivery of services in new or underdeveloped practice settings, often identified as emerging practice (Holmes & Scaffa, 2009). The definition of emerging practice is developing and providing occupational therapy services in environments where services have not conventionally existing or well-known.

Often, occupational therapy practitioners work on interprofessional teams. Articulating occupational therapy's distinct value is necessary to communicate with clarity to those outside of the profession. According to the American Occupational Therapy Association (AOTA) Vision 2025, *As an inclusive profession, occupational therapy maximizes health, well-being, and quality of life for all people, populations, and communities through effective solutions that facilitate participation in everyday living.* One of the pillars identified in the AOTA 2025 vision is Collaborative: Occupational therapy excels in working with clients and systems to produce effective outcomes (AOTA, 2017).

Purpose:

Despite occupational therapy's goal as part of the operating room (OR), specifically in burn rehabilitation, it is not yet an established practice setting. Integrating occupational therapy as a service in the operating room is not yet integral due to an absence of understanding of the responsibility and scope in this emerging practice area. Incorporating occupational therapy as an essential component of the interprofessional rehabilitation health care team will become possible when practitioners increase their knowledge about their role and communicate occupational therapy's distinct value to burn care programs. Stakeholders include surgeons, staff, managers, agencies, health care organizations, and legislatures (Villegas, 2016). Occupational therapy in burn care has a distinct value in addressing the primary needs of clients across the early-stage rehabilitation, especially those with multiple surgical procedures such as skin grafting in the operating room. Presently, there are limited burn care occupational therapists to fill this insightful need. Surgeons and other health professionals have a limited perspective of occupational therapy's role in burn care in the operating room; an attribute to this is limited experiences among occupational therapists.

Case Study:

Through the initiative of UMC surgeon Dr. Flores, she collaboratively integrated Occupational Therapy in the OR during the debridement and skin grafting process. While the patient is on sedation, the surgeon allowed OT to facilitate a range of motion, allowing optimal range of motion (ROM). The focus of the management in the acute phase of burn rehabilitation is the preservation of function through the prevention of deformities. The therapist's clinical and professional reasoning concerning a client's occupational performance (AOTA, 2020 p.20). Using the lens of OT:

AE is a 57 y/o right-handed female who was involved in a self-inflicted burn. Per EMS and patient, she said she set herself on fire with a lighter in the middle of the street. Unclear as to what fuel source she used to burn herself. Per EMS report, they estimated 80 to 90% partial to full-thickness burns on multiple body parts. In transport, the patient was hemodynamically stable and had a GCS of 15. The patient sustained 63% total body surface area burn to bilateral upper extremities, bilateral lower extremities, chest, and abdomen. Through her course, there are contractures of bilateral elbows, contracture of the left knee, and markedly decreased flexion at the left knee and bilateral elbows. OT and surgeon collaborated during OR procedures.

1. The surgeon and OT collaborated for further clinical investigation, such as limitation of motion for possible underlying medical factors such as Heterotopic Ossification (HO) that warranted x-ray imaging. Through a collaborative consultation with the surgeon, the surgeon ordered and imaging to validate underlying medical complications.
2. The surgeon and OT collaborated to facilitate a range of motion by providing medical intervention such as surgical cauterization. During ROM, OT identified which structures, such as axilla adhesion during shoulder flexion and abduction, by giving feedback to the surgeon regarding the limited anatomical structures. The surgeon addresses this by releasing the structural components to facilitate increased ROM due to contractures that are already developing.
3. OT was able to identify the extent of skin involvement and provided a guiding principle on identifying possible materials and placement of positioning devices readily available in the hospital. For example, abduction wedges and splints provide optimal healing positions, facilitate skin graft adherence, and prevent contractures.
4. After the debridement process, OT was able to identify underlying structures that the therapist will consider for preventive measures during the range of motion exercises, such as exposed bones, tendons, and ligaments, to prevent further complications during the healing process.
5. Identify the optimal range of motion using goniometry while the patient is in sedation. It will serve as a baseline for all therapists working with the patient during OT treatment when they are back in the burn unit.

Right Auxilla Skin Graft

Results:

Occupational therapy specialists use theoretical principles and models, knowledge about the outcomes of disorders on participation, and existing evidence on the efficacy of interventions to guide their reasoning. Professional reasoning ensures the proper selection and application of client-centered assessment methods, interventions, and outcome measures. Practitioners also relate their knowledge and skills to improve clients' participation in occupations and promote their health and well-being regardless of the effects of the disease, disability, and occupational disruption or deprivation (AOTA, 2020 p.21). Understanding this distinct role as an occupational therapist should start from the beginning of burn care management among patients with burns inside the operating room. Having said all this, our Rehabilitation Department Burn Therapy Team was allowed to learn the introductory course in scrubbing, gowning, and gloving for healthcare professionals.

Conclusion:

The idea of health care teams working together is not new. However, applying a culture of transformation, where concepts such as patient safety, mutual respect, shared decision making, and patient-centered care are the norm, remains a novel and often fleeting idea in most health care facilities (Sexton & Baessler, 2016). This initiative with the Burn Unit at University Medical Center (UMC) may serve as a model of care throughout the burn care center across the United States and beyond.

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