James Barrett Brown (1899-1971), Head and Neck Surgeon of a Half Century Ago

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This article summarizes the life and work of James Barrett Brown, MD (1899-1971), a plastic surgeon from St Louis, Mo, whose many contributions to the knowledge of surgery include his pioneering use of large split-thickness skin grafts to resurface defects. Along with a coauthor, he published an excellent book on radical neck dissection in 1954 (Neck Dissections, published by Charles C. Thomas, Springfield, Ill). Brown was a leading figure in the organization of high-quality plastic surgical care to injured soldiers in World War II. His training program in plastic surgery at Barnes Hospital in St Louis provided education to many leaders in the field. He received a number of honors for his many accomplishments.


It is important to remember the individuals on whose shoulders we stand as we engage in the care of our patients. James Barrett Brown, MD, was a person to whom we owe a debt every time we carry out the routine procedure of taking a split-thickness skin graft. A brief review of his career gives a picture of a significant contributor to medical knowledge and surgical technique.

BACKGROUND

Dr Brown1 (Figure 1) was born the son of a pharmacist in Hannibal, Mo, in 1899.2 His early education was in that city, following which he did his undergraduate work at Washington University in St Louis prior to matriculating in the school of medicine of that same university. He ranked high in his class, graduating in 1923, after which he was accepted for surgical training at Barnes Hospital, St Louis, where he worked under important figures in the history of American surgery, including Evarts Graham and Vilray Blair (Figure 2). Dr Blair was one of the first American surgeons of the 20th century to concentrate on head and neck cancer, an interest shared by Brown who joined Blair in practice in 1925—an association that lasted until Blair’s death in 1955. Other noteworthy surgeons joined that group at Barnes Hospital, including Louis Byars, Frank McDowell, and Minot Fryer. They published many articles on head and neck oncology over the years. It is reported that Joseph Ogura profited from his exposure to their teachings.

CONTRIBUTIONS

Prior to Brown’s work, skin grafts had customarily been cut freehand, a technique that required considerable skill. They were small and very thin, making them difficult to handle, especially when resurfacing large areas. Dr Brown’s research showed that when cut thicker and larger, skin grafts still promised good healing at the donor site.3 He coined the term split-thickness skin graft, borrowing the terminology from the leather industry. His work in the early 1930s revolutionized the established concepts of skin grafting, a change that had wide ramifications throughout the entire field of surgery. The largest impact was in the care of thermal burn injury.4,5 After the introduction of the mechanical and later the electric dermatomes, the cutting of grafts...
became more precise and required less skill and practice on the part of the operator.

The level of Brown’s dedication is manifested by his authorship of more than 300 articles and 60 book chapters. He was author or coauthor of books in the following areas:

- Surgery of the face, mouth, and jaws
- Plastic surgery of the nose, including reconstruction of war injuries
- Essentials of oral surgery
- Skin grafting
- Care of thermal burns
- Neck dissection

Albeit small (163 pages), Dr Brown’s book on neck dissection cowritten with Frank McDowell provides a very full account of the subject. It includes high-quality color drawings of the stages of the operation, good coverage of complications of the operation, and a section on combined neck dissection with jaw resection. All in all, the book provides an excellent account of the state of the art in a major part of head and neck oncology as of 1954.

MILITARY ROLE

Dr Brown played a major to role in organizing facilities for the reconstructive surgical care of war casualties in England in the 1940s. He was instrumental in the establishment of a number of plastic surgery centers in that country. Brown then played a leading role in the establishment of plastic surgery centers in the United States for care of the returned casualties, and he directed the one at Valley Forge, Pa. His service at that installation had as many as 2500 inpatients. Working with him were many individuals who became leaders in plastic surgery in subsequent years, including Milton Edgerton, a man who has left a significant imprint on the care of patients with head and neck cancer. Another coworker of that era was Joseph Murray, who later received a Nobel prize for his work on renal transplantation.

HONORS

James Barrett Brown was a member of the Society of Head and Neck Surgeons, and he was among the founders of the American Board of Plastic Surgery, which he later chaired. Other honors included the following: Vice presidency of the American College of Surgeons; Presidency of the American Association of Plastic Surgeons; Presidency of the Western Surgical Association; and Honorary Award Medal of the American Association of Plastic Surgeons.

CONCLUSION

The life of James Barrett Brown, MD, is an impressive record of what a gifted person can achieve if he has a high enough level of dedication. His accomplishments were not limited to clinical contributions but encompassed organizational and educational areas as well. He was a pioneer in the use of large, split-thickness skin grafts in
the care of the burn patient. His extensive experience in the reconstructive surgery of war wounds singularly equipped him to plan and carry out reconstructive procedures for cancer patients left with significant defects as a result of the ablation of their tumors. He organized the best possible plastic surgical care of war casualties. And he trained many individuals who subsequently became leaders in the field. The prestige of plastic and reconstructive surgery as a discipline increased markedly during and immediately after World War II, and Dr James Barrett Brown was a major factor in that rise.

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