Professor L.E. Hughes: a Legend in Academic Surgery Who Contributed Immensely to Indian Surgery

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Prof. L.E. Hughes decorated the chair in surgery at the University Hospital of Wales in Welsh National School of Medicine at Cardiff, UK between 1971 and 1992 (Fig. 1). We, the privileged surgeons, who received training in surgical science and skills under his patronage are very strongly drawn to express our feeling and the indelible marks he has left in our lives.

There are skills which subside with the person completing his journey in this world, but Prof. Leslie E. Hughes is immortal because the surgical skills which he imparted are growing steadily and encompassing the barriers of nationalities and social boundaries. Prof. L.E. Hughes had the singular characteristic of teaching by his sheer actions that started in the OPD when he first met the patients. There was no ambiguity in his discussions about the management either with the patient or the trainees. He gave full and graded responsibility to the trainees much earlier than was the norm elsewhere that instilled a sense of responsibility and dedication to the work assigned to the trainees. He had this wonderful knack of assuaging the requirements of trainees; therefore, he involved the trainees in research which was wonderfully designed in such a way that it first assessed the aptitude of a trainee and his/her capacity to apply his/her mind for more serious research.

Ward rounds were like going through a pious religious ceremony. No point was missed. The rectal examination was a norm rather than exception. He took as much time as was

necessary to go not only round the patient, but around his all other attributes. This gave a tremendous insight to Prof. Hughes in understanding the patient's requirement concerning his treatment. We do not remember any patient whose diagnosis was missed or who went unsatisfied from the ward. Prof. Hughes expressed extreme care for the well-being of the patients as well as the trainees.

Operation Theatre

Watching and working with Prof. Leslie E. Hughes was a tremendous learning experience. He would come to the operation theatre exactly at 8 a.m. and ask about important preoperative preparations such as bowel preparation and antibiotics. He would expect the registrar to be ready with all the necessary preparations. The registrar had to be ready with scrubbing and part preparation well in time. Prof. Hughes expected the registrar to have read the details of the operation, its related anatomy, pathophysiology and peri- and postoperative care. His dexterity during operation was unmatched. Every manoeuvre would be purposeful and very targeted. He was very particular about tying surgical knots with two hands—it had to be with both hands in a very synchronized manner. He had pioneered many surgical techniques such as double horizontal mattress—far and near suture for closing a laparotomy wound [1], surgical treatment of skin melanoma [2], mastectomy for breast cancer, breast reconstruction with rectus abdominis myocutaneous flap and latissimus dorsi flap, surgery for nipple discharge and benign breast disease [5] and surgery for hidradenitis suppurativa [6] just to name a few. He took special interest in teaching his trainees all these procedures with great enthusiasm and meticulous method. His 'far and near suture' for abdominal closure is now widely practiced around the world over as 'Cardiff—Prof. Hughes' repair' [6] and provides extremely safe way of closing abdomen without

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Fig. 1 Professor Leslie E. Hughes, FRCS, DS, Professor of Surgery 1971–1992

risk of burst. The excision of tumours was noteworthy. He would always follow a very radical approach—measuring the tumours with a vernier caliper and taking the excision margins precisely with a ruler—5 cm skin margins from the edge of tumour for a breast cancer even in mastectomy. (He never supported the breast conservation in his time and considered it as inadequate cancer surgery. Today, long-term follow-up studies are supporting his contention—the locoregional failure in all the studies is higher with breast conservation therapy compared with mastectomy.) The rule of 1 cm for a flat melanoma lesion and 2 cm for a raised nodular lesion was actually first developed by Prof. Leslie E. Hughes [2]. Following a cancer resection, he would irrigate the cavity with Milton's solution (hypochlorite solution) and change the whole operative instruments trolley with fresh drapes, gowns and gloves. He never compromised the resection margins for the sake of easy closure of the defect. He was an adept reconstructive surgeon and performed myocutaneous, fasciocutaneous and random-pattern local flaps with commendable skill and results. It is worthy of note that he had closely worked with a great plastic surgeon—V.Y. Bakamjian at Roswell Park Cancer Institute, Buffalo. He was the first British surgeon to have promoted the practice of immediate breast reconstruction [5]. His teachings in the principles of oncology were so influential and performance of a cancer resection so perfect that his disciples almost naturally became

inclined to the practice of surgical oncology and some of them rose to the pinnacle of oncology; to note a few, Prof. H.S. Shukla established the Department of Surgical Oncology at Banaras Hindu University and decorated the position of President of World Federation of Surgical Oncology; Dr. B.S. Srinath became a successful surgical oncologist of Bangalore and started the Bangalore Institute of Oncology; Dr. Ahmad decorated the chair at Department of Surgical Oncology—Regional Cancer Centre, Trivandrum; Prof. Sandeep Kumar became a reputed teacher and researcher at King George's Medical University; Dr. A.K. Khanna and Dr. V.K. Shukla at Banaras Hindu University; and many more in Britain and other countries. He had studied detailed pathological and surgical aspects of Crohn's disease and developed a new method of classifying anorectal Crohn's disease [6]. He pioneered a very effective and innovative method of open wound dressing with silastic foam elastomer [7]. His interest and dedication to the care of patients with various wounds is exemplified by the fact that he started a weekly 'granulating wound clinic' in 1972. This clinic later progressed to a fully developed 'wound healing research unit' at Cardiff in 1991. He along with his disciple Hari Shankar Shukla developed a new flap for covering large defects in the perineum employing an inferiorly based rectus abdominis myocutaneous flap [8]. His extensive clinical and research work on benign breast disorders at Cardiff Breast Unit culminated to the origin of 'aberration of normal development and involution' (ANDI) concept and provided foundation for a scientific approach to most benign breast diseases today. The ANDI concept helps in an easy understanding of pathogenesis and therapy of breast pain, nodularity, fibroadenoma, cysts and nipple discharge [9, 10]. His book on benign breast disease is the most comprehensive treatise on the subject and is considered the 'Bible of benign breast disease' [11].

Mitotic Meetings

He was a great proponent of combined modality approach for most cancers and hence conducted a regular weekly departmental mitotic meeting where all the cancer cases would be presented by a registrar, followed by a discussion with the team of oncologists from the regional Velindre Cancer Centre. These mitotic meetings predate the current 'multidisciplinary team' meetings. These mitotic meetings offered a great teaching and learning opportunity to trainees, as the diagnostic skills for lumps and skin lesions were honed together with the oncological principles of treatment were critically appraised. His Australian origin (where melanoma has the world's highest incidence) bestowed him with extreme competence in diagnosis and therapy of melanoma and other skin tumours. He would examine the lesion with a large hand lens and a vernier caliper (which he

always carried in his white coat pocket). His assessment of thickness of melanoma (preoperatively) was accurate to one tenth of a decimal millimetre, say 0.75 mm.

Breakfast Meetings

Every Friday, the academic activity would start at 7.30 a.m. sharp. There was one research presentation by a research fellow for 1 hour followed by detailed discussion on the methodology, findings and interpretation. Future research plans and projects were also formalized. This was followed by a guest lecture by a visitor from within UK or overseas. We heard some great scientists and surgeons in these meetings. The guest was taken around the departmental laboratories and the research and clinical staff was allowed to interact with the guest. Many registrars got the opportunity to go and work in the American and European centres of excellence through these interactions.

Radiology Meetings

Prof. Leslie E. Hughes had organized once-a-week clinic–radiological conference every Friday evening. In these meetings, all the radiological imagings performed during the week were presented. We would present the clinical history and findings followed by a discussion of the X-rays, ultrasounds, CT scans, etc. This was a very useful teaching activity where the trainees learned the right approach to a clinical problem, what tests to arrange and what not to.

Pathology Meetings

A weekly meeting with the Department of Pathology was held wherein the clinical picture was correlated with the histopathological features. Trainees learned the importance of studying gross and microscopic features of a disease.

Rehearsals for SRS

Surgical Research Society of Great Britain is a very prestigious body where highest standards of basic and applied research are presented biannually. The selection of abstracts is most rigid and all of us longed to get our abstract in the SRS. Prof. Leslie E. Hughes would take special pain in

helping us prepare the abstract, edit it ten times and make us present it repeatedly, rehearsing it at least 20 times before it was approved for final presentation and slide making.

Paper Writing at Home on Weekends

Since he was extremely busy over the weekdays, he would often call us for helping us write a research proposal or paper for a journal on the weekends either in his office or at his residence. He had a beautiful house with a small brook at the backyard. He left us for heavenly abode on 3 March 2011.

Conflict of Interest None

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