



Vale Catherin Hamlin - a personal homage

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Vale Catherin Hamlin

Born: Elinor Catherine Nicholson, January 24, 1924, Sydney, New South Wales, Australia

Died: March 18, 2020, Addis Ababa, Ethiopia



Dr Catherine Hamlin and Reginald Hamlin at the Addis Ababa Fistula Hospital.

Photo courtesy of Fistula Trust, from Internet

Catherine Hamlin was the spiritual mother of 2,000,000 African women who still today suffer from Obstetric Fistula and with her husband Reg, their saviour. In 1974, she and Reg opened their now-famous Hamlin Fistula Hospital and virtually de novo developed techniques to close obstetric fistulas. The Hamlin journey began in the late 1950s. Reg was Superintendent at the Women's Hospital Crown St Sydney, which at the time was the most famous Obstetric Hospital in Australia. Reg was in line to be given a consultant position at the end of his term. However, that did not work out. So,

Reg and Catherine applied for a position in Addis Ababa, and the rest is history. The Hamlin hospital has been the inspirational beginning of an ever-expanding network of dedicated organizations and surgeons, who are addressing the devastating problems of obstetric fistula in women worldwide. I worked with Catherine and then the Superintendent of the Hamlin Hospital Professor Gordon Williams in between 2011-12. My introduction to her was serendipitous, even humorous. I was reading Catherine's book "The Hospital by the River". At a certain point in the book, she described how the one remaining

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problem was that even after successful fistula closure, a large percentage of women, perhaps 20-30% continued to lose massive amounts of urine. The condition seemed very similar to the “Tethered vagina syndrome” (TVS) which the late Ulf Ulmsten, and I described for the first time in the 1990 and 1993 iterations of the Integral Theory: anything which destroys anterior vaginal elasticity, for example, over-elevation of vagina by Burch colposuspension, excess excision of vagina or fibrosis from mesh sheets “tethers” the more powerful posterior muscle vectors to the anterior; the posterior urethral wall is pulled open when given the signal to close; the patient loses massive amounts of urine typically on getting out of bed in the morning. The cure is a skin graft to the anterior vaginal wall which works by restoring the vaginal elasticity necessary to transmit the pelvic muscle forces for mechanical urethral closure and opening.¹ “*The humour*”. I wrote to Dr Hamlin suggesting I may have an answer to the problem. I received a curt reply from Dr Williams saying they had lots of offers from doctors to do fistula surgery, but they were not interested in fistula tourism, and with classically understated British irony concluded, “*thank you for your offer, but your assistance will not be required*”. I wrote back to say TVS patients have a scarred anterior vaginal wall, lose very little urine loss on coughing, but massive urine loss on getting out of bed, very little descent on ultrasound on straining, and the solution is a skin graft to the anterior vaginal wall. A few weeks later an email “apology” arrived and a warm invitation from Catherine herself. “*The serendipity*”, the first case was a Sudanese woman who had walked 2000 miles to the Hamlin. Catherine took an intense interest in the case and would question me about it

every night when we had dinner together. As things turned out, the operation, urethrolisis and a skin-on Martius graft succeeded, and she was cured. It may have failed, and the cure for this problem, on-going leakage from successful fistula closure may have had a different story. Since 2012, renowned fistula surgeon Andrew Browning has continued to develop this methodology further using a skin-on Singapore Flap graft.¹⁻³ His results are outstanding, at least 400% superior in the worst cases, Goh class 4. He has used the graft prophylactically, applying a simple principle: if the edges of the dissected vagina do not come together naturally, a skin graft is applied. By her hospital, Catherine was the alpha of fistula treatment for 2,000,000 African women, and serendipitously, by her book, *The Omega*. Vale Catherine Hamlin, a magnificent human being whose devotion and example has brought the best out in her fellow humans and produced a better world.

ETHICS

Peer-review: Externally peer-reviewed.

REFERENCES

1. Petros PEP, Williams G, Browning A. Post vesico-vaginal fistula repair incontinence - A new hypotheses and classification potentially guide prevention and cure. *Pelviperineology* 2015; 34: 48-50.
2. Browning A, Williams G, Petros P. Skin flap vaginal augmentation helps prevent and cure post obstetric fistula repair urine leakage: a critical anatomical analysis. *BJOG* 2018; 125: 745-9.
3. Williams G, Browning A, Petros PE. The integral theory and its tethered vagina syndrome revisited: vaginal scarring may cause massive urinary incontinence. *BJU* 2018; 122: 532-4.