

Milestones

Archibald Donald, William Fothergill and the Manchester Operation

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The Industrial Revolution in the early 1800s brought upon remarkable changes to human lives with the introduction of the steam engine, weaving plants and a number of similar marvels of the times. Industrialization drove people from the villages to cities and employment was usually found in factories, mills and mines. Women's lives were in a state of flux in this era. They continued to bear the same number of children as the previous generation but they also started working outside the home. In some areas of England, 75% of the

workforce comprised of women and children.¹ Of particular interest was the occupation of women in the cotton mills of Manchester. Being the centre of a large industrial population employing much female labor, uterine prolapse abounded in Manchester. This precluded any further heavy manual labor and also cut off a steady source of income for the family. Attempts had been made to alleviate the lot of these patients by anterior colporrhaphy, by perineorrhaphy, or by amputation of the cervix, but except in rare instances these



Fig 1. Archibald Donald.

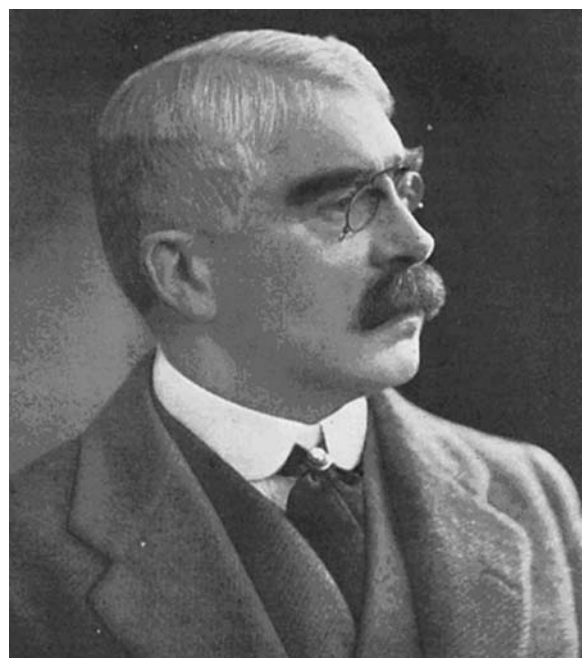


Fig 2. William Edward Fothergill.

methods did not cure the condition. At that time these cases, for practical purposes, were incurable and the best that could be done was to repair the perineum so that a pessary could be retained. The conservative surgical repair of uterine prolapse was pioneered by two leading gynecologists of the time in Manchester, Archibald Donald and William Fothergill.

Archibald Donald was born in May 1860 in Edinburgh and educated at the Craigmont school and the University of Edinburgh. He received his medical degree in 1883. He joined the Royal Navy and had a voyage to India as Ship Surgeon in 1884. His next appointment when he returned home was to the St. Mary's Hospital, Manchester as a Senior Resident. He was then appointed to the staff of the Hospital. This association was to prove to be a life-long one. Appointed at a young age as a member of staff proved to be as much a welcome move as one which was met with resistance by older members. His attempts at promoting gynecological surgery as a separate discipline were often thwarted in the early days. His early career was marked by remarkable abdominal surgeries and growing expertise of operating in the pelvis. These were the days before Lister's principles and basic surgical principles of asepsis, suture material and safe anesthesia were in routine practice. He was soon to be renowned as a gynecological surgeon and a master accoucheu. (Figure 1) His attention to the problem of uterine prolapse was drawn in the late 1880s. In 1888, he attempted about five conservative prolapse operations. The chief features of his operation were to combine anterior and posterior colporrhaphy with an amputation of the cervix if it was too thickened.² He often performed the operation in two separate sittings. In the first few cases, he used silver wire and later carbolyzed catgut was used. The catgut was a better material since it could be buried and this allowed the deep tissues to be built up in layers. With few modifications according to the patient's pathology, Donald had a high success rate in curing this problem and his operation became a standard therapy. However, he did not write much about the operation and this was a job taken up by a junior colleague, William Fothergill.

William Edward Fothergill (Figure 2) was born on October 1865 in Southampton and brought up in Darlington, where his ancestor, John Fothergill, a grandson of the elder brother of Dr John Fothergill, had settled and practised as a surgeon. He was educated at the University of Edinburgh and obtained his medical degree in 1893. His career before and during medical studies was

a decorated one including a gold medal for his doctorate thesis in 1897. Seeing that the scope for operative gynecology seemed limited and being dissatisfied with a purely consultative practice, he sought greener pastures. With some advice and encouragement from colleagues, he moved to Manchester in 1899. His first appointment was to the Northern Hospital for Women and Children where he served for six years as the first Director of the Clinical Laboratory for the Royal Infirmary. After his appointment to the staff of the Southern Hospital in 1904, and its subsequent amalgamation, he was absorbed as a member of the staff at St. Mary's Hospital. He was quick to pick up the nuances of abdominal and vaginal surgery and made significant improvisations on the surgical practices of the day. His greatest contribution to gynecological surgery was the refinements of the Manchester operation that Donald had begun but Fothergill perfected.³ He combined the earlier two-step operation into a single procedure and emphasized on the importance of ruling out uterine pathology before undertaking the procedure. He gave an elegant description of the procedure and its technical nuances in 1915⁴ He was a keen proponent of the vaginal approach and openly criticized the widely practiced abdominal fixation procedures. It was his tenacity, flair and personality that led to a wide acceptance of this procedure across the country and indeed across the world.

Both Donald and Fothergill went on to have long and illustrious careers at Manchester, achieving professorships and various other professional awards and decorations. Donald had a burgeoning private practice and he continued to work at St. Mary's Hospital and the Royal Infirmary. He passed away in 1937. Fothergill died a few years earlier in 1926. He had a brilliant career in public health besides his contributions to gynecological surgery.

References

1. Wrigley EA. Continuity, chance and change. The character of the industrial revolution in England. Cambridge; The Press Syndicate of the University of Cambridge, 1998.
2. Shaw W. Archibald Donald. *BJOG* 1937;44:527-535.
3. Fairbairn JS. William Edward Fothergill. *BMJ* 1926;2:913-914.
4. Fothergill WE. Anterior Colporrhaphy and its Combination with Amputation of the Cervix as a Single Operation. *BJOG* 1915;27:146-147.