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REVIEW ARTICLE

Garnett Passe and the tonsillectomy gag

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Abstract

Kevin Kane has written about the painting by Barbara Hepworth of Garnett Passe performing a tonsillectomy, and wondered about the way in which the gag appears to be suspended. This article traces historically the various methods of holding the gag for tonsillectomy, and postulates that what is illustrated in the Hepworth painting is a jack owned by the late Dr Sydney Cocks, who not only was a friend of Passe but who also commenced the discussions with Passe's widow, Barbara, concerning the formation by her of a trust to support young Australian ENT surgeons, which eventually became The Garnett Passe and Rodney Williams Memorial Foundation.

Key words: Garnett Passe; Barbara Hepworth; Sydney Cocks; Tonsillectomy; History

Introduction

Dr Kevin Kane has written about the surgical paintings created by Barbara Hepworth in the late 1940s, and in particular the two paintings held by the Garnett Passe and Rodney Williams Foundation in Melbourne, Australia. The second of these has been called 'The Mouth Operation' or 'The Tonsillectomy', and depicts Passe operating (Figure 1). Dr Kane comments, 'There is no visible anaesthetic tube nor obvious Boyle-Davis gag…with the patient in this supine position with hyper-extension of the head'. He adds, 'There appears to be a mechanical arm coming up from the region of the patient's chest with a right angled extension which may be a now obsolete method of fixing the gag'.[1,2]

Dr John Booth has written much more extensively about the surgical drawings by Hepworth of Passe operating, particularly of him performing the fenestration operation.[3] Dr Kane has also written a full account of 'The surgical art of the sculptor Barbara Hepworth' published in *Studio International*.[4]

This article traces historically the various methods of holding the gag for tonsillectomy, and postulates that what is illustrated in the Hepworth painting is a jack owned by the late Dr Sydney Cocks, who was a friend of Passe and Barbara, his wife.

History of tonsillectomy methods and instruments

Until the late 1940s or early 1950s, tonsils and adenoids were removed most often by the guillotine method. In this method, the child was anaesthetised with an inhalation induction, commonly ether or ethyl chloride. The anaesthetist then surrendered the child and his airway to the surgeon. The patient was laid on his right side for a right-handed surgeon and the mouth opened with a simple gag such as the Doyen mouth gag. The surgeon introduced each tonsil with his left index finger into the opening of the guillotine (Figure 2) held in his right hand. The blade was then advanced to avulse the capsule of the tonsil from its bed and to divide the tonsil pedicle from the lymphoid tissue at the base of the tongue in one swift movement. The right tonsil was removed first so that blood pooling on that side of the pharynx did not obscure the left tonsil. The adenoids were then curetted. No anaesthetic was delivered from the time the surgeon took over. Furthermore, unless he was very quick, the adenoid removal was often incomplete and sometimes even the left tonsil was only partially removed. No attempt was made to staunch the bleeding. The child was held head down and transferred to the recovery area. Recovery was usually uncomplicated and relatively swift.

Dissection tonsillectomy had been introduced in the early years of the twentieth century by Dr George E Waugh.[5] He was a general paediatric surgeon at the Hospital for Sick Children, Great Ormond Street, London, where, incidentally, another general paediatric surgeon, an Australian, Sir Denis Browne, invented the tonsil-holding forceps, which are still in general use today.

Waugh had the patient placed in a supine position with their neck hyper-extended and a pillow placed under the shoulders. The patient's mouth was held

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FIG. 1
'The Tonsillectomy', painted by Barbara Hepworth. Reproduced with the permission of The Garnett Passe and Rodney Williams Memorial Foundation, Melbourne, Australia.

open with a simple gag as above. The tongue was pulled forward over the front lower teeth using a tongue clip or 'silk ligature' inserted through the substance of the tongue. This was held by an assistant, thus keeping the airway open. The surgeon either sat at the head of the operating table, or stood at the side of the patient, changing sides for each tonsil dissection. Anaesthetic gases were introduced into the mouth through an open tube hung over the patient's lip, and could be controlled for as long as necessary, enabling the surgeon to secure any bleeding points that did not stop spontaneously. This method was still employed by Dr James Crooks at Great Ormond Street in 1965 (personal observation).

Dr Henry Boyle (1875–1941), an anaesthetist at St Bartholomew's Hospital in London (who gave his name to an anaesthetic machine), saw a gag invented by Dr Davis from the USA, and had it copied by Down Bros, a London medical instrument maker, who called it 'The Boyle-Davis Gag'. This allowed dissection tonsillectomy with the patient in the same position as with the Waugh technique. The open airway was maintained by the blade, which depressed the tongue. The blade had an integral tube, with a spigot proximally, to which the anaesthetist attached a rubber tube that delivered gas (usually ether or oxygen/nitrous oxide mixture) directly into the pharynx from its distal open end.

FIG. 2
A set of tonsillectomy guillotines previously owned by the late Dr Sydney Cocks.

Endotracheal intubation became the usual method of delivering anaesthetic gases in the late 1940s, giving improved anaesthetic control. For tonsillectomy in adults, the tube could be passed through one nasal passage so that it did not obstruct the surgeon's view of the pharynx. However, the tube was an obstruction for adenoidectomy in children.

In the early 1960s, another anaesthetist, Dr Alexander Doughty from Kingston-upon-Thames, had the idea of slotting the tongue-piece of the Boyle-Davis gag, so that an endotracheal tube could be inserted and held in the slot between the tongue and the blade. Thus, the surgeon's view of the pharynx was not obstructed and the nasopharynx was clear for adenoidectomy in children. Interestingly, the same idea occurred at about the same time to Dr Tom Allen, an anaesthetist at the Adelaide Children's Hospital, with neither individual knowing what the other had devised. In this, they were rather like Thomas Edison and Joseph Swan, who both 'invented' the electric light bulb in 1879 on opposite sides of the Atlantic.

There have been a variety of systems for suspending the Boyle-Davis gag. The commonest in use worldwide today are the rods invented by Dr David Draffin when he was a registrar at the Royal National Throat, Nose and Ear Hospital, in London in 1951.[6] In the 1950s and 1960s, the Boyle-Davis gag was sometimes hooked onto a Mayo instrument table or onto a right-angle bar attached to a slide on the side of the operating table. Sometimes an assistant simply held the gag. At the Adelaide Children's Hospital, a rope was attached to the operating theatre ceiling behind the surgeon's head, and this was hooked over the gag and pulled tight with a wooden bar, similar to a tent guy rope.

Hepworth painting

The jack that appears in the Hepworth painting from 1948 does not seem to be any of the aforementioned instruments. It is possible that it is the jack which belonged to the late Dr Sydney Cocks (Figure 3). Dr Cocks worked in London in the late 1940s, and while there he was befriended by Barbara and Garnett Passe. The early discussions Barbara, Garnett Passe's widow, had about the formation of a trust to help young Australian ENT surgeons (which eventuated in The Garnett Passe and Rodney Williams Memorial Foundation) took place between 1962 and Dr Cock's death in 1968. Dr Cocks brought back to Adelaide a number of surgical instruments given as

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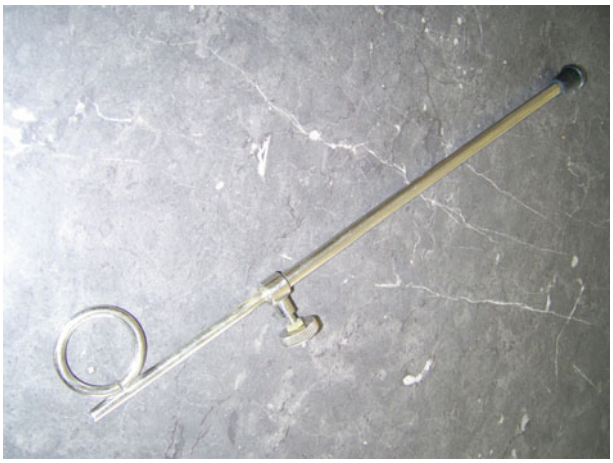

FIG. 3

The tonsil gag suspension jack, previously owned by Dr Sydney Cocks and now in the possession of The Garnett Passe and Rodney Williams Memorial Foundation, Melbourne, Australia.

gifts by London colleagues, including the tonsil guillotines (Figure 2), which were a gift from Dr William Mill, ENT Surgeon at St Thomas' Hospital, and the jack referred to above, both of which were inherited by the writer of this article.

Dr Kane mentions in his papers that the surgeon in the Hepworth painting 'The Tonsillectomy' appears to be wearing a head mirror rather than a head light. However, looking at this and the sketches reproduced in John Booth's paper, I, the writer, am fairly certain that what is illustrated is the Clar 55 electric headlight (manufactured by Storz), like the one also inherited from Dr Cocks and used by me for many years.

The 'Cocks' jack can be varied in length: one part 'telescopes' into the other and can be fixed by a screw-knob. There does seem to be an adjusting screw in the painting. It is possible that the ring at one end was hooked onto a tongue clip, similar to the method used by Waugh, with the clip being fastened through both the tongue and the ring. In the painting, there is another rod at right angles to the first, going down onto the patient's chest. The other end of it would have to attach to the first rod, perhaps by a small yoke. The black plastic knob on the top of the 'Cocks' jack could be to prevent the second rod sliding off the shaft of the first. The second rod would need to be held by an assistant, in the way that Waugh had his assistant hold the tongue clip. It is possible that what is shown in the painting is a means of removing the assistant's hand from the surgeon's view. Of course, this is all conjecture as such a second rod is not known to exist. The 'Cocks' jack has now been presented to The Garnett Passe and Rodney Williams Memorial Foundation.

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