Tom Chapman and the Glasgow Punch

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Abstract
Thomas Lightbody Chapman (1903 – 1966) founded the urological department at the Victoria Infirmary, Glasgow. After travelling to the Mayo Clinic in America to learn the new technique of punch prostatectomy he brought that procedure back to Glasgow.

The prostatic punch required skill to master but could be successful in the right hands. Chapman was a great teacher who used innovative techniques to educate his students in the skills of punch prostatectomy. These included a training model where the trainee surgeon could be observed punching out a phantom prostate and a cine-film using both live action and animation to demonstrate the technique. Keen to share his enthusiasm for the punch prostatectomy he organized a meeting of like-minded urologists, a group which became the Punch Club, a travelling urology club still active today.

Tom Chapman was a colourful and dynamic individual, devoted to his work and his patients. His name will be remembered as being almost synonymous with the punch prostatectomy in Great Britain.

Keywords
Thomas Lightbody (Tom) Chapman, prostatic punch, prostatectomy, history of urology, Glasgow urology

Introduction
Thomas Lightbody Chapman was born on 16th June 1903 (Figure 1). He trained at Glasgow University, qualifying with an MB ChB in 1928. He was a senior house surgeon at the Western Infirmary and later an anatomy demonstrator at the University. He had further training in London at St Bartholomew’s Hospital, passing the English MRCS and FRCS in December 1933. For a time he became a Clinical Assistant at St Peter’s Hospital for the Stone in London. St Peter’s was a specialist hospital for urology and the centre for urological surgery in London and indeed the UK at the time. The Clinical Assistants at St Peter’s were attached to one of the Assistant Surgeons (also known as outpatients surgeons). These positions were in great demand by postgraduate surgeons wishing to acquire urological skills. They were particularly useful to gain skills in cystoscopy and manipulation of urethral instruments. The Clinical Assistant post was quite different to that of the Resident Surgical Officer who assisted in the operating theatre and managed inpatients. In 1933, the Full Surgeons at St Peter’s were John Swift Joly (1876 – 1943) and Clifford Morson (1881 – 1975) the Assistant Surgeons were FJJ Snorker Barrington (1884 – 1956), Ronald Ogier Ward (1886 – 1971), the future first president of BAUS, and ‘Jock’ Alban Andrews (1887 – 1964).

Chapman returned to Glasgow and was appointed to the surgical staff of the Victoria Infirmary, where he formed the urological department. He also became consultant urologist to Hairmyres, East Kilbride and Ballochmyle Hospitals. In 1948 he was elected Fellow of the Glasgow College (FRFPS) and in 1949 was awarded a ChM, with high commendation from the University.
The Punch

In the mid 1930’s Chapman travelled to America, to the Mayo Clinic where he learned the technique of punch prostatectomy from Gershom Thompson (1901 – 1975).

A type of punch prostatectomy was described in 1836 by Louis Mercier (1811 – 1882); indeed it’s possible that something like a prostatic punch was designed by Ambroise Pare (1510 – 1590) as long ago as 1575. The modern era of the punch however was initiated by Hugh Hampton Young (1870 – 1945) in 1909. Disappointed by the small volume of prostatic tissue winkled out of some prostates by the open operation, Young adapted his urethroscope to punch out pieces of prostate transurethrally. The view was poor and the bleeding considerable, indeed it was more of a technique of feel than vision.3 The concept was pursued however and the instruments improved.

William Braasch (1878 – 1975) adapted his cystoscope into a punch, which improved vision but not haemostasis. John Caulk (1881 – 1838) added an electrified cutting edge to improve haemostasis but the vision was still poor, although this was improved by Denham K Rose (1886 – 1976) in 1925. In the same year Kenneth Walker (1882 – 1966) from London added a Bakelite sheath to insulate the urethra. However it was Herman Bumpus in 1926 who combined Braasch’s cystoscope, a Caulk-style cutting blade and a separate flexible electrode to coagulate and control bleeding under direct vision.3

1926 saw another related invention, the Stern resectoscope. In a similar story, Joseph McCarthy (1874 – 1965) later combined this first resectoscope, designed by Maximilian Stern (1843 – 1946) of New York, with his own excellent panendoscope incorporating the cutting and coagulation current diathermy of the South Carolina urologist Theodore Davis (1889 – 1973).4

This created two camps in the urological world of transurethral prostatic surgery, those who used the hot wire loop of the resectoscope and those who used the cold punch. Chapman became a great advocate of the punch prostatectomy. Of note, at the same time in Glasgow, Arthur Jacobs (1899 – 1974) working at the Glasgow Royal Infirmary and Walter Galbraith (1889 – 1960) of the Western Infirmary were keen early users of the resectoscope.

Tom Chapman adopted the Gershom Thompson punch, which was a modification of the 1926 Braasch-Bumpus punch (Figure 2). With both early resectoscopes and punches there was considerable adaptation and alterations by British and American surgeons alike. He later also used a Robinson Punch. This was designed by RHOB ‘Joey’ Robinson (1896 – 1973), a British urologist working at St Thomas’s and a future president of BAUS. This provided a larger field of vision and a more efficient rotating blade. Chapman began carrying out punch prostatectomies in January 1938.5

Chapman developed a special unit for his punch prostatectomies at Hairmyres Hospital, Glasgow. Although he had established the urological unit at the Victoria Infirmary in Glasgow this was mainly focused on diagnosis and emergencies.

Chapman designed a unit there complete with outpatient clinics, a radiology room and cystoscopic theaters equipped with Xray facilities. The majority of inpatient care was carried out at Hairmyres Hospital some seven miles away. With bed pressures not dissimilar to today this allowed for better inpatient care. Although, as Chapman states, it was rather inconvenient for the surgeon and patients’ relatives who had to travel there.6

In the unit at Hairmyres Chapman was ably assisted by Dr Waclaw Kraszewski (1904 – 1958), a Polish refugee surgeon. Kraszewski, a native of Warsaw and a graduate of Krakow had escaped the Nazis and joined the Free Polish Forces fighting through France and Italy. He joined the Polish surgical unit in Ballochmyle Hospital, Ayrshire and then worked with Chapman in Hairmyres. In his obituary, Chapman describes him as a rapid, accurate surgeon with much admired clinical judgment and high standards.7
The prostatic punch is an unfamiliar instrument to the modern endourologist accustomed to the fine optics, digital vision and efficient diathermy of the latest resectoscopes. The punch was a direct vision instrument, there was no lens system; it was perhaps more akin to looking through the window of a rigid sigmoidoscope through the column of fluid flowing into the bladder. At the time, Chapman felt this was a great advantage to a good view even in the presence of considerable haemorrhage. The prostate was inspected and the side window of the punch opened. The obstructing tissue fell into this window and the blade was advanced to chop it off. Bleeding points were controlled with a Bugbee type electrode. Chapman made the particular point that most of the hypertrophied tissue was excised, not just a channel. The surgeons at the Mayo clinic were removing up to 110g of prostate although, writing in 1943, Chapman’s record was 42g.5 In his first 100 cases mortality was 6% and 93 of the 94 survivors could void, although three were better off with suprapubic drains. After four years there were five cases of definite or probable re-obstruction and one case of incontinence (subsequently cured by the Millin procedure).5

The Punch Club

Transurethral prostatic surgery at this time was not easy. It was a procedure that required some considerable endoscopic skill; the punch perhaps even more so than the resectoscope. Gershom Thompson, who taught many of the British and Irish urologists, told William Wardill (1894 – 1960) of Newcastle that ‘to put a resectoscope in the hands of a man who is not prepared to study it is like giving a submachine gun to a small boy who has been reading Deadwood Dick’.8 Open surgery of the prostate was more common and perhaps easier and more successful in the hands of those surgeons more used to open operating. The keen enthusiasts of endoscopic surgery, which almost defined early urologists, banded together to discuss their techniques in the Urology Section of the Royal Society of Medicine, the British Society of Clinical Urologists and later in BAUS. The proponents of the punch were a rarer group still. In the Spring of 1949 Tom Chapman proposed a meeting of surgeons with an interest in the punch. He travelled to Tom Lane’s unit at the Meath Hospital in Dublin along with Henry Hamilton Stewart (1904 – 1970) of Bradford and John Swinney (1912 – 1988) of Newcastle for a two day meeting to discuss punch resection of the prostate, a somewhat neglected subject at the larger urology meetings. Chapman, Stewart and Lane had been using the punch for over ten years, treating 80% of their prostate patients this way. John Swinney had recently taken over William Wardill’s prostatic punch unit in Newcastle General. The meeting was a success and they decided to hold an annual meeting rotating around each member’s hospitals. They called their group the Punch Club. The meetings were to be informal with no minutes taken and no speeches at the annual dinner. However, Chapman who was made their ‘energetic and colourful secretary’ usually proposed a characteristically humorous and witty vote of thanks to the host after dinner.9

The membership of the Punch Club in its early years identifies those other urologists who commonly used the punch: Ronnie Reid (1900 – 1965) of Colchester, the previously mentioned RHOB Robinson, Walter Mimpriss (1905 – 1989) also of St Thomas’s, James Cosbie Ross (1904 – 1989) of Liverpool, JD Fergusson (1909 – 1979) of St Peter’s and St Paul’s hospitals and Thomas Moore (1909 – 1999) of Manchester.9 Over time the operation of punch prostatectomy declined but the Punch Club continues today being a general urological travelling club.

Tom Chapman the teacher

Despite the difficulties and the skill required, Tom Chapman was keen to teach his registrars the technique of punch prostatectomy. Chapman was a good teacher. He was an honorary lecturer in Urology at Glasgow University and as a keen photographer he made use of his hobby to illustrate his teaching. He published an illustrated book, ‘Urology in Outline’, which is a very well written basic urology textbook with excellent clear line drawings; it was very popular with students.

In order to train his registrars and to ensure they had grasped the necessary skills of the punch before allowing them to operate on patients, he invented a teaching aid. This phantom prostate was made of rubber with a Perspex plate at the bladder side so Chapman could watch how a trainee punched away at a (replaceable) prostate made of a plastic like substance called Vinamould. The learning curve took several weeks.10 Chapman published a description of his teaching model so others could use it11; I wonder if anyone else had the patience to make one? (Figure 3).

Using his hobby of photography and skills at drawing Chapman made a training film on the punch prostatectomy. This combines live footage of him operating with coloured cartoons of the view down the punch resectoscope. It was impossible at that time to make a good quality film down the resectoscope. Indeed, it was this very problem that led Jim Gow (1917 – 2001), a Liverpool urologist, to ask Harold Hopkins (1918 – 1994) in the 1950’s to help improve the optic of the cystoscope. This of course led to the development of the rod lens system and eventually the demise of the poorly lit punch resectoscope. Chapman’s cine-film was rescued and restored by Mark Harrison, a retired urologist and son of George Harrison, one of the original Punch Club members. The film can be seen (sadly without its now lost original soundtrack) in the Museum of Urology on the BAUS website (Figure 4).
Tom Chapman the man

Chapman was said to have been a kindly enthusiastic man with a wonderful sense of humour and an easily recognisable laugh. Apparently, Tom Chapman and Arthur Jacobs used to entertain themselves by leaving amusing messages on each other’s recording machines. Chapman lived at Park Lodge on Calderwood Road in Glasgow and would often walk his cat on a lead around there late at night; at least once being stopped by the local police.¹⁰

One of his former SHO’s description of working with Chapman gives a flavor of the atmosphere of his firm:

‘Another feature were the famous ham sandwich lunches pre-theatre on Friday afternoons at Hairmyres. The ham was brought in by Dr. Evans, anaesthetist and a great mound was produced. Mr. Chapman showed great dexterity in palming a highly significant portion - I have to say, they were very good, and vanished with remarkable speed.’¹⁰

Latterly Chapman took up fishing, which he thoroughly enjoyed, approaching it with his usual enthusiasm. He would often fish with his anesthetic colleagues Dickie Evans and Albert Christie and took annual trips with them to fish in Glendaruel in Argyll. In Chapman’s obituary Albert Christie recalled that, ‘Whether he caught a fish or not didn’t seem to matter: with tongue characteristically in his cheek, he would say it was the “mystique” of the business which appealed to him’.

Conclusion

The operation of punch resection of the prostate forms an important chapter of the history of urology. An American procedure, it was introduced into Great Britain by a handful of enthusiasts who mastered the skilful technique, demonstrated its usefulness and promoted its use as an alternative treatment to TURP and open prostatectomy. Tom Chapman was one of those enthusiasts and brought the punch to Glasgow. His enthusiasm and skill not only benefitted his Scottish patients but his able teaching skills passed the technique on to many more urologists. One of the founder members of BAUS, Tom Chapman died at his home, Park Lodge, on 18th July 1966 aged 63. To finally quote once again his anaesthetist Albert Christie, ‘He was an enthusiast in his work … to be in his company was a refreshing and exhilarating experience … Tom Chapman lived a full happy life … whose every moment was filled with activity.’¹

Conflicting interests

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