HISTORICAL ACCOUNT OF TONSILLECTOMY.

BY

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EXTIRPATION of the tonsils must have been commonly practised at a very early period. The first clear mention of it is made by Celsus (A.D. 10) in his *De Medicina*, cap. vii, sect. 12, but he speaks of excising the tonsils with such familiarity that it was evidently considered a very ordinary procedure. He writes:

Tonsils which remain indurated after inflammation, if covered by a thin membrane, should be loosened by working the finger round them, and then torn out; but when this is not practicable, they should be seized by a hook and excised with a scalpel.

Aetius (A.D. 490) gives the following account of the operation:

The portion which projects—that is, about one-half of the enlarged gland—may be removed; those who extirpate the entire tonsil remove at the same time structures which are perfectly healthy, and in this way give rise to serious haemorrhage.

Paulus Aegineta (A.D. 750) gives precise instructions as to excision of the tonsils.¹ He would not operate on them when inflamed, and describes them as fit for removal when they are white, contracted, and have a narrow base. The head of the patient is held, his tongue pressed down with a spatula by assistants, and the tonsil, being seized and drawn outwards by a tenaculum, is cut out by the root. Albucasis (A.D. 1120) takes Paul of Aegina as his model, and gives the same directions, but he is more cautious in his advice, and dreads haemorrhage.²

After this period the operation became almost obsolete, and succeeding writers omit all mention of it. Even Ambroise Paré (1509) advised tracheotomy where serious enlargement of the tonsils exists.³ Fabricius (1540) believes "the operation is neither easy nor altogether safe."⁴ Guillemeau, the pupil of Ambroise Paré, ligatured or cut away the diseased masses, but did not agree with removal of the entire tonsil.

In 1637 Severini, during an epidemic, removed large portions of the glands by caustics, hook, or semicircular knife; but for a whole century afterwards excision of the tonsils was discountenanced. Dionis (1672) opposed altogether the removal of the tonsils,⁵ while Sharp (1688), a pupil of Cheselden, also feared to excise the tonsils and condemned the operation,⁶ although he removed small portions of the gland by ligature and cautery.

The surgical treatise of Heister was the most popular textbook during the first half of the eighteenth century, and his opinion is as follows:

This operation is not only too severe and cruel, but also too difficult in the performance, to come into the practice of the moderns, because of the obscure situation of the tonsils.

After 1740, however, the operation by means of the tenaculum and the bistoury was again much practised, the credit of the revival being largely due to Wiseman.⁷ His practice was to ligature the tonsils and then to cut off the projecting portion. From 1757, when Caqué commenced to excise tonsils at the Hôtel-Dieu of Rheims, excision of the tonsils became one of the recognized operations of surgery, the dread of haemorrhage being proved to be groundless. Instruments were improved, and new methods invented of performing the operation. Almost every eminent surgeon made some modification of the instruments used for the purpose by his predecessors. The method most generally favoured was to employ a bistoury or pair of scissors, the blades being curved or straight; an assistant pressed down the patient's tongue, the surgeon seized the tonsil with a vulsellum, and, drawing it out, cut off as much of it as he could. As late as 1880 many surgeons still operated with the knife or bistoury, but the guillotine and the wire *écraseur* were then coming into use. A general anaesthetic was seldom given, but sometimes potassium bromide was given in large doses for several days before the operation.

Velpeau (Chassaignac, op. cit., p. 109) reported four cases in which the internal carotid artery was laid open whilst a portion of the tonsil was cut away with the bistoury. About 1875 the common carotid artery was successfully ligatured at the London Hospital for continual

haemorrhage after excision of a tonsil. A tanno-gallic acid gargle was used for persistent oozing, or ice was given to suck,⁸ or marsh-mallow lozenges.

The method of Celsus of tearing out the tonsils by the finger was revived in 1860⁹ by the Italian Borelli, but again deservedly fell into disrepute.

The fear of haemorrhage was a spectre which dogged the steps of all the early operators on the tonsils, but with newer methods of removal and knowledge of the anatomy of the parts, this is a much rarer complication nowadays.

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OPERATING TO THE CLOCK.¹

BY

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RECENT reports of the treatment of war wounds by Sir Anthony Bowlby and others, in which particular stress has been laid on the necessity for operative rapidity in grave cases, tend to diminish the diffidence which one naturally feels in publishing personal matter, and to strengthen the conviction previously expressed, that more lives may be saved by surgeons "putting themselves under the authority" of the clock than probably has been heretofore generally appreciated.

In operative surgery, as in sport, there are some who focus the situation and put their ideas into action more promptly than others, but this by no means implies that the lightning operator or fast player is necessarily the best exponent.

Celerity in operation, apart from cinema or sleight of hand exhibitions, is, and always must be, sternly subject to one irrefragable law—there must be no scamping of the cardinal principles of surgery. Any infraction, notably inadequate attention to injured blood vessels, interferes with the physiological repair of wounds,² and not infrequently determines the fate of the patient. But given conscientious workmanship, it is reasonable to infer that the success of many desperate operations must be in ratio to the time occupied in their performance, since experience has amply proved that the longer the exposure the greater becomes the risk of shock and other complications.

The publication of this series of 1,200 and odd operations, each completed within twelve minutes, a number limit suggested by clock (and which contains 1,000 operations concluded within a ten minute limit), is solely intended to impress on surgeons, who may not, as yet, have found their stride, that design, detail, and execution form an interdependent trio, which by constant association and practice develop automatic co-ordination between the brain and hands, admitting of concentration and rapid application, with a corresponding economy of time, which may, in some instances, be the vital factor in the operative result.

A glance at the appended list will suffice to demonstrate that most of these operations are simple repetitive ones, and consequently renders it obvious that personal dexterity becomes a very secondary consideration in comparison to the methodical arrangement of the procedure; I have little hesitation in stating that, irrespective of the magnitude of the operation, it is the minute study of details and the correct order of their application which constitutes good workmanship. If I were asked what detail in particular merits most attention, the reply would be: keeping the parts from start to finish under manipulative domination, as there is nothing so prodigal of blood and time and nothing so bewildering as to allow severed structures—for example, the flaps of an amputated cervix uteri, the stump of a subtotal hysterectomy, or the incised wounds of a gastro-enterostomy—to slip out of control at the crucial moment and flood the whole field with blood. Also I think that there is nothing so conducive to expeditious surgery as knowledge of the anatomy of the part, nothing so detrimental as unnecessary chatter, and there is no greater handicap than that obsession of overcare which often ends in fumbling into or laying the very traps which the indecisive brain is labouring to avoid.

Operation.	Minutes.											
	1	2	3	4	5	6	7	8	9	10	11	12
Appendicectomy, ¹ some with drainage					2	12	9	18	26	23	59	23
Salpingo-oophorectomy, single ... [111]					4	4	7	25	2	39	6	24
Salpingo-oophorectomy, double ... [6]					1	2				3	1	2
Fysalpinx (single); extirpation, drainage										2		3
Oophorectomy, single ... [4]										1	1	2
Oophorectomy (single); appendicectomy									1	1	1	2
Oophorectomy (double); appendicectomy									1			1
Hydatid tumour of omentum, enucleation										1		
Extrauterine gestation ¹ ... [2]										1		
Hysterectomy, vaginal ... [14]					1	1	1	2		3	2	4
Coelio-hysteropexy ⁸ ... [36]					1	1	1	7		2	16	2
Hysteropexy and appendicectomy ... [3]												
Colporrhaphy ... [3]								1				1
Cervix uteri, excision ... [4]								1	1	1		
Cholecystectomy, drainage ⁴ ... [13]					1		2	1	4	2		2
Cholecystostomy ... [8]								1		2	4	1
Choledochotomy, drainage ... [2]								1				
Coelio-hepatotomy (marsupialization; hydatid) ¹ ... [15]								2		1	5	4
Coelio-hepatotomy (abscess), drainage	1							1		1	1	1
Hepatotomy, transthoracic; excision of rib; marsupialization ¹ ... [23]		1				2	3	3	1	5		6
Nephropexy (Lane's operation) ... [21]								1	5	6	2	4
Nephro-lithotomy (single); drainage						1			1	1	3	1
Nephro-lithotomy, lumbar (double); large impacted "funnel calculi"; uraemia; recovery ... [1]					1							
Decapsulation of kidney (double Edebohl operation) ... [1]												1
Prostatectomy, suprapubic; drainage		2	3	4		3	3	2	3	1		2
Lithotomy, suprapubic; drainage ... [4]		1				1						1
Urethrotomy, ext.; perineal vesical drainage; Wheelhouse operation ... [3]								1		1		1
Urethrotomy, ext.; perineal vesical drainage ... [9]	1	1	2	1			1	1				2
Hydatid, post-vesical; drainage ... [1]												
Varicocele; excision ⁵ ... [42]	3	7	2	4		4	6	4		2	9	1
Hydrocele; excision ¹ ... [55]		1	1	4		8	6	8		5	6	4
Hernia, femoral (Bassini) ... [5]								1	1	1		2
Hernia, inguinal, radical cure (Bassini-Hastred, O'Connor ⁶) ... [80]							1	3	4	13	26	15
Hernia, strangulated inguinal ... [1]							1					
Hernia, umbilical ... [7]									3		2	1
Hernia, ventral ¹ ... [9]									1		4	2
Haemorrhoids (modified Whitehead op.) ⁷ [204]						5	26	30	2	24	44	7
Pruritus ani (Ball's operation) ... [2]						1		1				
Post-colic abscess; drainage ... [2]								1		1		
Empyema; excision of rib; drainage		4	1	2		2	1	2		2		4
Hydatid of lung; excision of rib; marsupialization ⁸ ... [3]						2				1		
Hydatid of pleura; excision of rib; drainage ... [2]								1		1		
Gastrostomy ... [2]												2
Colostomy ... [4]										1	2	1
Mesenteric serous cyst; drainage ... [1]												1
Hydatid of mesentery; enucleation												
Arthrotomy of ankle; drainage ... [36]				1	6	2	14	2	8	3		
Arthrotomy of elbow ... [2]												1
Arthrotomy of hip ... [2]												
Arthrotomy of knee ¹⁰ ... [130]				8	9	20	35	6	13	7	4	20
Arthrotomy of shoulder ... [6]						1	2		2	1		
Arthrotomy of wrist ... [17]				4	3	7	1		1			
Excision of hip (head of femur)												
Fractured patella—sutured ... [1]												1
Fractured tibia—Lane's plates ⁹ ... [3]												3
Cancer of tongue ... [2]								1				1
Amputation of breast (mastitis and adenoma) ... [7]									1	1		2
Semilunar cartilage (excision); Sciatic nerve stretching (open op.) ... [14]							2	1	3	1	3	3
Thyroid cyst (excision) ... [1]												
Varicose veins (excision) ¹¹ ... [32]					1		2	5	3	10	1	7
Coecyx (excision) ... [4]						2	1					

The figures in brackets in the first column represent the total number of cases for each operation.

As to the personal equation I have nothing to remark except that the time resultant in my operations is largely due to the stimulating anticipatory help of loyal assistants.

In conclusion I wish to add that I never take the time of any operation; this is always done independently by two assistants, who likewise attend to the instrument and sponge count, and who transmit their figures directly to the hospital registrar, to whom I am indebted for all the enclosed figures.

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Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

THE AGE INCIDENCE OF THE PREVAILING
EPIDEMIC OF INFLUENZA.

HAVING observed every epidemic of influenza since 1889 I have been much impressed by the liability of the present influenza to attack children and young adults. During the last three months I have seen several hundred cases, and only two of these (both very mild ones) have been over 50 years of age; in fact, most have been well under 40.

This is very different from all my previous experience, in which no age was exempt. Can the reason be that in this epidemic a streptococcus is the active agent? If so, the present epidemic resembles scarlet fever, also a streptococcal disease, in which the age incidence is most marked in children and young adults, and people over 50 are almost immune. If, on the other hand, a streptococcus is the active agent, is it not strange that the visible changes in the throat are so little marked, for I have not seen a single case in which follicular tonsillitis or enlarged cervical glands were present?

Bedford.

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SURGICAL EMPHYSEMA DUE TO PERFORATION
OF THE LEFT BRONCHUS.

On November 1st I saw a child, aged 4 years, who was stated to have had influenza about a fortnight previously, leaving him with a cough which had been better the last few days. On the morning of November 1st he seemed in much better health; but he did not eat breakfast, and on picking him up in order to dress him the mother found that his body was swollen.

On arriving at the house about 11 a.m. I found the whole trunk, neck, and the right eyelids were greatly swollen and of a doughy consistency, but no crackling could be elicited. At 11.45 the left eyelids became swollen, and the swelling extended down the arms. By 12.45 the swelling had extended to about the middle of the forearms and down the thighs almost to the knees. A tympanitic note could be obtained on percussion over any part of the swelling, and emphysematous crackling could be elicited on palpation. The swelling of the eyelids was so great that on attempting to separate them the inner surface of the lid became everted, obscuring the eyeball, and the scrotum was blown up to the size of a billiard ball. The child died at 12.55.

At a post-mortem examination made by Captain H. C. Taylor, at 3.30 the same day, the swelling was of the same extent, and on making an incision over the sternum the air could be heard escaping from the tissues; this was much more marked on opening the left pleura. The tissues in the anterior mediastinum were of a frothy appearance; both lungs were collapsed and congested. The heart, lungs, and trachea were drawn out and separated by cutting above the larynx, and some pus was discovered in the nasopharynx; no appearance of an abscess was found in this position, but on slitting the trachea longitudinally more pus was found at the bifurcation and could be squeezed from the left bronchus. On opening the bronchus a perforation about one-sixteenth of an inch in diameter was discovered just beyond the bifurcation of the trachea apparently connected with what seemed to be a suppurating lymphatic gland; and through this, no doubt, the air was forced by the movements of respiration.

Eastleigh.

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LEVADITI reported to the Société de Biologie, Paris (November 16th), the curious observation that a wound which has been infected by streptococcus is little likely to be reinfected by the streptococcus from another wound in the same individual, and that the same is true of an attempt to reinfect the wound with a cultivation of the streptococcus from the man's own wounds. On the other hand, the wound can be reinfected by the introduction of a virulent streptococcus from another person. Such an observation is rather bewildering, but the most probable explanation seems to be that the virulence of the streptococcus is reduced during the process of cure. At a previous meeting he had stated that the streptococcus disappeared from wounds treated with a lipovaccine and an ether-sensitized vaccine made from the streptococcus.