Gluteal aneurysm

Thesis for M.D.

By

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Introduction

I have taken gluteal cancerous as the subject of my thesis for and because a case presenting conditions of exceptional obscurity and gravity came under my notice care and treatment as ordinary daily practice.

Indeed I have found the selection of a topic extremely difficult and often times truly impossible because though like the road to a venerable with good intentions happened to the other choices that were made tentatively to be invariably set aside when I came to study and write up them constantly discovering that I was but on some well worn path and that the subjects were treated with such an exhaustive manner and with such fluency and precision that nothing had seemed was worth adding to them.

And being well aware that every human of the Edinburgh university has to present to his head master in exchange for the degree of Doctor of Medicine a subject tinctured if not replete with originality I have taken the case whose history shall be recorded forthwith as the basis of my
theme as I believe that as it I have found

truly worthy of note and in these pages

humbly submit it for your approval as it

appears to me as far as I have kept touch

with available literature to be unexampled

and without an analogue. With such

interest did it impress itself that I have

interwoven history and theme for your

consideration.

Furthermore can I be obligated to this selection

much as several practitioners of age

and experience who saw the case in

consultation with me attested to its

interest and rarity and strongly advised

me to keep my notes and with the help

of the writings of others to work the subject

Especially as the case was attended

with such happy results and would be

well worth recording.

Influenced by these motives I watched the

case carefully and aware that it was

essentially necessary to guard against the

dangerous weapons of bright and original

ideas I secured all the literature I could

on the subject the most valuable by virtue

of its comprehensive survey being a brief

exposition by Mr. James Keen Holmes in

Bradshawites Retrospect of Medicine Volume
To July 10 December 1874. In this lengthy article I frequently referred and will have to quote it often in these pages, and here let me say that I will make reference to the works and authors I have consulted and insert them as I go through the paper.

In Refutation I cannot say that I am totally removed from men of intellectual vigour and professional activity as those who saw the case with me beside it and about Newcastle and have good opportunities and as I have their testimony to its importance I am the more convinced that the subject is not an unworthy one. They all expected a total result from the accident and as I followed the case to a conclusion witnessed a cure I saw the more actions to chronicle. I know that it requires courage to start and endeavour to arrest attention but Gluteal aneurysm as a subject can hardly be considered both worse and hackneyed as Holmes in writing in 1884 says that it is a rare disease and one with which no surgeon is sufficiently familiar to speak with much decision as to its treatment. This is the third edition of the work and in the same place he refers to the article published in Bradlaugh in 1874.
There were thus in Fixture table 36 cases rendered both Traumatic and Spontaneous. 33 cases are accounted for by lines as follows:

27 Gluteal
6 Sciatic

33.

Of the 27 Gluteal 13 were Traumatic and 14 Spontaneous and of the 6 Sciatic 2 were Traumatic and 4 were Spontaneous.

In the second last column of Schedule two more cases are recorded one by Gaslozzi of Naples and one by Dickerslith of Liverpool.

These then are the Considerations which have pressed strongly on my mind and led me to fix upon this subject and I cannot not be obliged any further by them but will now detail the case and incorporate it with the theme of Gluteal Anaesthetic.
On Wednesday, the 22nd July 1886, I was called to see a young man aged 16 years who had met with an accident occasioned by the falling of a block of earth upon him. When I saw him I felt sure that there was no injury of any great severity and went away satisfied that he was but severely bruised but with most intensity over the right hip. I visited him daily upon my rounds till the 6th of August and he appeared to progress very rapidly. At that time he was up on the sofa and his father had taken him out for a drive in the buggy. On the following day I looked in to see him and found that he was not so well since he had been driving and that he was confined to bed again. He complained of pain in the right gluteal region and on making a rigid examination I found that it was more swollen than it was at the time of the accident but I, either influenced by the unconscious inventiveness of prejudice or anxious to adhere to my first opinion possibly persisted in very original views that there was nothing here to account for the swelling but a severe bruise and the swelling was due to extravasated Blood.

But to offer solace to the parents who saw
more solicitous than impatient about the boy and to lighten responsibility and secure helpful suggestions I sought the assistance of another medical man who at that time agreed with me in diagnosis. The next day however I was much astonished to find that the swelling recorded a pulsation on manipulation and a bruit under auscultation. In other words the swelling was anæmographic in nature and flutulent in its locality but what vessel was wounded or severed I will never be able to say. The pulsation was not vehement in character nor the bruit very loud but they were unmistakable and convinced my medical friend. He returned next day that we had a traumatic flutulence to deal with.

But to establish the diagnosis with more precision and to eliminate uncertainty because the consulting considered abscess a possibility a medium sized hypodermic needle was inserted and this revealed suppuration to obscurity. This exploratory puncture in my belief led to explanation by the insertion of a foreign body as next day the bruit and pulsation were gone and never returned and the swelling hard but elastic immobile. Physical sci shape
and its limits imperfectly defined. The pressure of the congealed mass so affected the patient that morphia had now to be administered purely to mitigate his sufferings.

Case of Mr. X. Aug 9th. The pain intense and continuous, though borne with fortitude and Christian resignation. 1/4 gr. of morphia given endurinically, induced narcotism, the swelling less and tender to the touch and tend to extend upward rather than downwards.

Aug 10th to 12th. The pain constant and sleep could not be obtained without morphia. No apparent increase in size, the old medical gentleman who now saw it believed it the an abscess. This point will be alluded to more particularly under the heading of diagnosis restorative of its difficulty when the case has not been under observation from the beginning.

Aug 25th. Since this fortnight the pain is much less severe but as there is no sign of any diminution in the swelling a consultation with another practitioner is asked for. Dr. Morgan a gentleman of good repute and standing answers the request and is baffled at first but seems to understand the case as related by me.
in this ease of heroic treatment.

Sept 26. Dr. Morgan re-examined my patient
and is quite certain that the tumour
has enlarged since he first saw it. He
urged me to watch it closely lest it show
any tendency to give way by the skin. But
as there did not appear to be any immediate
danger of rupture and as the vitality
of the limb showed no signs of being impaired
and as the pain was within endurance
we agree not to interfere especially as
the secondary haemorrhage, which we ere
took place and ceased thinking that a
spontaneous cure was the best to encourage.

Sept 27. Swelling gone and all functions in good
order. Dr. Morgan saw it again and as it
remains stationary we agree on the
expediency of putting on an aspirating
needle thinking that if the wound in the
vein had healed we might possibly be able
to draw off any fluid (i.e. the non-coagulated
part of the contents) and then apply pressure
locally but we did not succeed in doing so.
The motive for this action will not stand
the test of enquiry or bear the analysis
of strict scientific investigation but despite
all this I do believe that as "methodus
medendi" it acted well in this case.
...and with this I left him (decided to continue)
lodging of Potassium in four grain doses 3
times a day, and to have applied at the
same time externally the ointment of the
lodging of Potassium of the British Pharmacopia.
In him as justice I have a right to mention
that he did not expect much from it and
was careful to say that the ointment should
be applied on foot and not scrubbed in, as
the pustule might break down the clot, X
hemorrhage recourse.

Sept 2nd. As this dose the above treatment
was carried out but as the pain returned
I discontinued it. Moreover as I found
detected a steady widening in the area
of the aneurysm, I believed that it was
interfering with the natural process of
cure that had been going on, and as there
was no return of blood or pulsation, I
believe that the blood poured out and
poured between the pad and the clot.

Sept 10th. A third surgeon is admitted
in consultation. He has been in a
large collecting practice for 10 years, the
trusts it follows in lots and ventures
to advise free incision and tearing out
the clot but I who heard the brisk
and felt the pulsation could not acquiesce
for soon afterwards the point at which we inserted the aspirating needle began to feel
and from the opening caused blood to flow
this irritated the margins of the aperture
and it gradually increased in size a creme
shade that enabled the fluid to come away
more freely till it got large enough for
small sized clots to be pressed out the wound.
We always watched very narrowly lest
arterial blood showed show itself and a
hasty abdominal tourniquet was secured
and kept in readiness lest operative
interference become necessary. But
though the gunshot needle aperture had
now increased to the arrow like which
the index fingers could be inserted no
hemorrhage occurred. Clotted venous Blood
drained away and finally when the
swelling had much reduced by this
constant drainage several large laminated
Coagula were discharged leaving no
doubt as to their arterial nature.
Evacuation of the sac was now complete
and the pieces left was sponged out
with Codisp fluid and gradually healed
up and the last time I saw the boy
he was doing his daily work and so
ended successfully the case that began
to insidiously.

I will now with your permission under the under-mentioned headings weave in this case with Allergies of the Patient.

1. Nature

2. Diagnosis

3. Treatment
   a. Compression
   b. Salvarsan gramine
   c. Corticosteroid therapy
   d. Medical treatment
      1. Penicillin
      2. Anc
      3. Antibiotics

4. Remarks
By gluteal aneurysm is meant one affecting gluteal artery or its superficial or deep branches, the sciatic or the internal pudic as it winds around the spine of the ischium. But to say which of these is involved in any case of gluteal aneurysm seems to me to be a matter of extreme difficulty unless the case ends fatally and a post-mortem be obtained. There is evidence that all three have been the seat of aneurysms, as we have complete records of the subject in 1879. Dr. Holmes says that the gluteal artery is the one most frequently affected and that the sciatic has been involved as in the case of Stevens of New York, who had the internal iliac and was successful. The internal pudic is its short course over the ischial spine has also been inflicted as the preparation in Guy's Hospital will testify. Experiments in his work on surgery show that this is the only case on record where the internal pudic has been the seat of aneurysm. Additionally to all this an abnormal artery, the sciatic, has been suffering as shown by fellow-facilities in Guy's Hospital Reports. So that in the face of all this it is not
much use in any medaling or any
speculations as to the exact vessel that was
the seat of injury but I cannot help thinking
that it was the Gluteal itself or one of its branches.
A conclusion arrived at mainly from a
Statistical Handbook as Dr. Holmes says the
Gluteal is the most frequently affected and
as Forman in his work on Surgical
operations Part 2 on the physiology of arteries
states it to be four times as frequent as the
but its position located in upper part of body
and tending to extend up rather than down
as pointed out in the details of the case
would be made incline to the view of Gluteal.
But a study of the case to which I have
invited your attention will show that
something more than the arterial trunk
implicated will have to be arrived at as
we see from the history and course of the
 lesion that the lesion was composed
as its nature containing as the case
evidently did (a sac formed by the
condensation of the muscular parietal
muscle) both pectoral muscle and arterial block.
Consequently the theory that I intend
to advance as harmonizing to my mind
most agreeably with the phenomena
of the case is that the sac of Earth
first met seriously damaged the neck
contes (which according to Gray and
Worboys attack the subclavian artery)
or the smaller vessels and that these being
ruptured or severed led to the Effused
Extravasated Blood which represented the
swelling seen on the day of the accident
to the skin and that at the same time there
was a partial subcutaneous laceration
of the artery which however did not yield
in its continuity till afterwards.

And as having a direct bearing upon this
inference as drawn from a Consideration of
the case I may in this relation quote Sympson
and Spence

Sympson's writing of arterial injury, and
repeated in Bradliwate Volume XCI January
2 June 1885 under the title of partial subcutaneous
laceration of arteries, says that in this form
of injury in which there is no escape from
the vessel the immediate swelling that does
occur is due to the escape of Blood from
the smaller vessels in the overlying and
surrounding tissues.

Spence says in his lectures on Surgery
that if a vein be opened by an indirect
wound under the skin it gives rise to
effusion of Blood into the loose cellular
tissue around it forming aenberg of glistening white size called a Thrombus which is nothing more than a clot of Blood.

And for the information that a partial subcutaneous laceration of an artery may be considered a distinct and substaneous lesion. I have to acknowledge my indebtedness to Holms, Bryant, but particularly to the special memoir on Symonds in Brachwarte already alluded to. Also to the Dictionary of Practical Surgery edited by C. Heath

whence Geo. K. James makes himself responsible for the statement that "an arterial subcutaneous rupture are the most frequent causes of traumatic subcutaneous aneurysm." Bryant in his fourth edition of the Practice of Surgery Volume I page 494 says that "injury to an artery is occasionally the cause of aneurysm but more frequently the injury is but the disease that produces the aneurysm. Whenever the walls of an artery are weakened by accident or disease or the loss of natural support they become liable to dilate under any sudden or prolonged increase of the force of the circulation" e.g by the drive in the buggy that my patient took, and again he says that sometimes a vessel will rupture some day after the injury at a point that has been severely contused causing a secondary
Subcutaneous hemorrhage. The bleeding occurs after the fifth day and an aneurysm may form and require treatment. But it is from Charles Symonds valuable contribution that I have gleaned most knowledge on this point as his article in Bradwell’s 1885 July deals with it. He defines partial subcutaneous laceration to be an injury where the external coats are ruptured the external tissue as cicatization remaining intact. The laceration may extend all round the vessel or there may be little or no incarceration. It is effected by violence, as a blow or overstretching or both combined. Violence in going on to say will lead to the partial subcutaneous laceration and is an unquestioned cause of aneurysm. Richards experiments done on the dead subject after rigor mortis has set in illustrates this for example forcibly over-extend the knee till the ligaments are heard to crack and the two inner coats of the popliteal artery will be forced ruptured.

I have selected these abstracts from his article as they appear to me more principal and of interest as to the exact manner in which the aneurysms that I am dealing with arose and will now allow...
we to explain & settle its pathological anatomy was fully according to the theory already submitted.

Having regarded the initial swelling as due to the venous effusion it behoves one in having acknowledged the injury to the artery to trace the changes that took place in it and account for the breach and pulsation that our acusa were convinced of.

I believe that the artery became stretched against the underlying bone by the same injury as gave rise to the primary swelling suffered rupture of the internal and middle coats and that this only involved a part of the circumference and that the circulation through the vessel was not arrested but went on uninterruptedly till the boy went out for the drive in the buggy the shaking and jolting of which led to the rent in parts giving away and effusion to follow as I was often told that the breach & pulsation were found and we decided that a hematoma aneurysm had formed.

From Woodhead's 'Traumatic Pathology' defies Traumatic Aneurysm to be formed when a vessel is wounded and Blood escapes into the surrounding tissues
gradually displacing them till they form a lining wall around the vessel and that there may be pulsation in a cavity so formed.

But I am aware that there are diverse views held regarding this pulsation. Bryant and Holmes deny its presence while admitting its reality. But further search into the subject has given me a little more confidence in my own and the concurrence of observation as Augustus Pether writing in his Dictionary of Practical Surgery says, "That pulsation is mostly absent but when present is only over a limited area and for the nonce let me impress an elementary caution and out of the depths of my mendicity cry to you to be charitable enough to assume that our auscultation was over that spot, and there could in this large wound possibly say, "that pulsation may be found in such a swelling provided that the parts are compressed and condensed so as to form a spurious sac and floor for this compression and condensation having been afforded by the pressure of the initial venous swelling." For it was confined without doubt and the pulsation could not.
obtained and it was not till after the
needle was used for exploration that we
lost trace of them and as the consolidation
remained they never returned.
And I think there are sufficient particulars
in my case to enable me today that though
the excision from the inside of the vessel
at all probability occasioned complete
laceration, incursion of the inner coats
was not complete as the secondary
subcutaneous haemorrhage invalidated
that view, or perhaps the lumen of the
proximal end of the artery became permanently
obstructed with plastic lymph and attendant
clotting but that as Gustave has shown
the natural haemostatic process toward
reparation was delayed in the distal end
of the vessel and that the secondary
subcutaneous haemorrhage took place
proximity. However the end of both
became finally sealed and never opened
again though it cannot be gainsaid
that guarded opportunities were open to
such disturbance while the contents
of the aneurysm were being evacuated
by pressure.
But though we watched narrowly for
any outward evi...
Bleeding are were rewarded for our vigilance after the moral principle that virtue is its own reward. Bleeding ever took place and the issue was justly into our hand.

This view of the mode of origin and formation of the aneurysm though advanced at some length disclaims any intention of being ingenious or laboured but is faithfully proclaimed as the most probable explanation of the different phases which the tumour assume while the young man was under my care and it appears to me to fit in so well with the facts of the case that I must respectfully ask you to acquiesce in the theory.

Another view that would appear to me to be not out of keeping with the disclosures of the case is however invalidated through Bryant saying that it is rarer in civil though common in military practice. I refer you to the Disaccidental Theory where the wall of the vessel softly and fine away. But as it would be un prudent to recur contrary to the dictates of so eminent a surgeon I will not prolong its.
Finally a spicle of bone might account for all, a version tenable but without the stamp of probability as this would necessitate the presence of a fracture in the locality of the sacro-iliac foramen through which the gluteal artery emerges, which it would be pedantically possible over at having been named.
Diagnosis

There is no problem of greater importance to the surgeon than the correct diagnosis of a pulsating tumour; in most instances its solution is easy if care be only taken but from time to time cases present themselves which test to the utmost diagnostic skill and knowledge if indeed a diagnosis be possible at all. Such is an extract from Rara Gould on his chapter on the diagnosis of pulsating swellings.

Dr. Balfour wrote in 1874 Holmes says that very real and very great difficulties beset the surgeon in the diagnosis of aneurysms of the Buttom so that in approaching the subject from this standpoint there trespassing upon very debatable grounds and showed the view that I have the honor of formulating and presenting to you be respected it is but a repetition of what has happened in many other cases even with men of Eminence and though I regard accuracy in diagnosis as of unquestionable value and are all important requisite for success in treatment still I will take courage in my inferior skill if I have searched for but not found that ideal. Or perhaps, an explanation may be found in the following which is derived from Sir Henry Thompson's work on tumours of the Bladder, speaking of the diagnosis...
he says, "In all diseases whatever is real on nature our first object in examining a patient is to form a diagnosis of his disease by investigating its nature. If we use the data and fail the defect is rarely due to our want of scientific knowledge of the disease but to our inability to obtain the facts required in the particular case."

In my student days I often heard of the aneurysm that pure opened believing it to be an abscess in this region and thus done in more ways than one reminded to make to feel and fully realize my position as a diagnostician, and the most embarrassing to encounter are traumatic false aneurysms. Exactly the case I have in hand. Though I do not admit being baffled because I saw the boy from start to finish still I think I can illustrate the diagnostic difficulty by appealing to the cases of other surgeons and by pointing out the different opinions of the surgeons who saw the case in consultation with me. But before doing so I will place before you succinctly the premises upon which was formed the conclusion that I came to and this will reach at the same time that each form of aneurysm has its own definite symptoms.
One not to its nature but to its position.

1. The initial swelling without any pain which I have regarded as a thrombus or blood clot.

2. After the irritation occasioned by the drive in baggy the enlargement of the swelling which was non expansible, in all denouement equal soft and pulsating with a bruit which I have already described but preferring Spencer's descriptive appellation will name it suppuris.

3. The exquisite pain due to pressure upon the sciatic nerve or upon the superior gluteal nerve which emerges above the Piriformis muscle with the gluteal vessels to supply the median maximus muscles.

4. The result of the exploratory puncture

5. The occurrence of the secondary subcutaneous hemorrhage

These are I think enough to establish the diagnosis of aneurysm but if there were any exigency in these symptoms they are strengthened and rendered preceptible to my mind by the auxiliary clinical fact of venous blood and clotten
Coagulated luminated blood being expelled from the tumour. This evidently clears it up and at the same time acts exceedingly upon its dual nature a view propounded and already developed under the preceding heading. This is my own position but why it was not so clear to the other surgeons here in the circumstance that they did not see it from the beginning and only once or twice during its progress to that sources of anguish which crept in and soon flowed there. While giving me no concern, the absolute safeguard against erroneous diagnosis is however not to be found in having a case from the very beginning. The following instances of Schuh's, Arendt, and Prozagoff, traced from incipience illustrate this. In Schuh's case the man had a deep wound in the buttock which healed. Three weeks afterwards a swelling was opened in the same locality for an abscess and it turned out to be aneurysmal. Arendt and Prozagoff mistreated an aneurysm of the aorta for suspecting an abscess they advised punctures and incision and finally made a deep incision into it to have their skill and address tested in combating with profuse arterial haemorrhage.
These are cases which show what Bryant has pointed out at volume i page 560. And in addition "that very often we have as much to depend upon history as upon physical signs." For he says these aneurysms are often consolidated and so enlarged and diffuse that they press upon the soft parts and do not exhibit any pulsation for there are aneurysms that do not pulsate and it is here in the diagnosis that he refers to the importance of the history.

These instances of failure so far to show that where there is absence of pulsation due to absence of a local history should be taken into account and moreover the exploratory needle not forgotten.

And though perhaps not immediately belonging to the subject I cannot refrain from stating here the value of the "premature vacuum" in making an exploratory puncture. Before Read Graham Brown's manual on medical diagnosis I was not aware of it but since then in Clifford's all but writing I have come across it (Braithwaite 1894) and found that he refers to it as a diastolic requirement of no practical value. And though he places what appears to be more
almost universally reported as the suitable apprarentment of Ringer's use of the Hypodermic needle in this relation. I cannot understand why he speaks so condemningly or at least lightly of ensuring a vacuum beforehand, because if it does not enhance the chance of success it will surely not interfere with it. However know that in my own practice it has worked much better and has been more definite in results than the other method.

To return to my subject after this digression. The gentleman to agree with me in the diagnosis of my case was he who saw the case at the first, and was convinced of the pulsation and anacalabry phenomena. The other surgeons were more sceptical and most of them inclined to accept an assumption which appears to be very common as the literature is dotted with reference to such cases.

The other diagnosis to which I will turn is that of Hectillation. That is where blood is effused and is more or less limited and circumscribed but yet forming a distinct tumour and in such cases the Blood comes from the smaller vessels. The surgeon who was inclined to this opinion advocated
you will remember that a false invasion
be made and the clots turned out but happily
it was overruled as too heroic and the
fraternity of the doctors had their committee
would be by none more deeply regretted the
by its author a good kind sympathetic
surprize who now lives in his grave and
knows the author of this thesis over
his A.B.C.D. and sequentially the attempt
secured the reward of M.D.

For upon this book monograph in Death,
General Surgery says that in a simple hematoma
may be confounded with a non-pulsating
aneurysm but it has no bruit and it tends
to lessen rather than increase in size from
absorption going on and in this case it
was disproved by the presence of a bruit
and the increase in size from the
Secondary subjacent hemorrhage.

With the sources of pallor in idiopathic
aneurysms I have nothing to do as being
beside the question at issue but from what
I have gathered in reading the subject up
I find that even in them as in Traumatic
it is very imprudent to rely upon any sign
or symptom as pathognomonic and in
order to arrive at a safe and sound Conclusion
every means at our disposal should be
avoided of. This cannot be deemed if we
look boldly as the tale of each case as present
Kewest. Wilde, and the Nlue Surgeon Booth
and more especially to Grummier's case where
the trio Cooper, Beale and Thomas were invited
to give independent opinions and at answer
to the request all signally failed. I we omit
the preservation of Beale (if preservation can
be called) who was first inclined to (case)
but ultimately came to acquiesce in the
opinion of his colleagues.

Examine the interior of the bivis by
introducing the hand and to use Dany's
metal lever are aids to diagnosis, that
did not float across my mind at the
time the case was in study but through
the opportunity present itself again I will
not fail to employ them as one should
I am satisfied take every precaution
opportunity and advantage in order to
arrive at a clear conception of his case
so as to be able for treatment which
now requires me that I have that
part of my subject to deal with and
will show do so.
Treatment

To affix the exact designation to an aneurysm of the buttock is admittedly a difficult matter and to correctly determine the precise nature is another. The first proposition may be considered established because on the authority of M. Holmes it is stated that without aid or assistance, dissection they are difficult to identify, and the second proposition can hardly be doubted when we refer to the cases that were missed by such clinicians as Ride, Eros, Suttee, Freest Heat and the Italian Surgeon Forte.

Likewise in coming to the treatment we are left what to do for the best. There is however less demur in not more unanimity than there was half a century ago when Guthrie declared as if it were incontrovertible that the internal iliac should be tied, when Lyme advocated ligation at seat of aneurysm by spring the sac according to the ancient method of the Greek Roman Surgeon Agyllius who lived 350 B.C. Where D'Israel gave preference to the French plan of enec and Servier supported and followed us to make by Dider proclaimed in favour of iron excisions. But in the midst of all this orth
and difficulty we are assured on the
inaccessible word of the few, that
that Gluteal aneurysm like many others
when of moderate size are not insusceptible
of spontaneous cure and that indubitable
cases wit this result are recorded and may
or others the disease long remained stationary
so that unless the symptoms be extremely
urgent we may be watchful not meddlesome
cautious not anxious and remember that
Expectancy if it may be so termed may not
be in vain and that it will withhold us from
any operative interference till we are satisfied
that are cannot do without it if the results of
which are certain the probabilities of
success highly problematical. To support this
position my case may now be added to those
of Dubrail, Baisson and Lyne.

The most practical distinction of aneurysm
say, Holmes is according to their different
cause viz.

a. Traumatic
b. Non Traumatic

But owing to certain limitations to be referred
to more particularly will be in a traumatic
Gluteal aneurysm may require to be dealt
with for a chance of cure which means which
as a rule may be said to more properly appertain to the idiosyncratic force.
To follow the course prescribed by me for authority and unwilling to dissolve the surgical canons that a ruptured or wounded artery should be cut down upon and both ends secured especially as I recall remembering that injunction from W. James, whence from whom many words of wise wisdom and sound counsel were derived in the course of his class examinations in Systematic Surgery.
I thought very strongly upon the point but in the course of reading discovered that the test for reliability and curability were evolved at the moment of the opening and that if it happened to be within the pelvis, his failure to secure the end by ligation might be disastrous to me and my patient and hence looked around me knee. What bloodless plans were recommended to deal with such a case and happily possessed in a gift to me from a gentleman I succeeded in practice several Brothwatches one of which he has given the substance of the literary leading or scientific work every by Dr Holmes. Here he has summarized the treatment to be with the light of his matured extended experience to be
as follows.

1. Spinal aneurysms with traumatic and spontaneous are very peculiar circumstances for the treatment by either rapid or gradual compression applied to the aorta or common iliac.

If this treatment does not succeed by itself, it may be supplemented by conserving yeying or salvarsan; puncture while the patient is narcotised and the circulation commanded.

7. Where such treatment fails and especially in aneurysms with imperfect and perforated sacs where it is not indicated the puternal iliac must be tied when the surgeon thinks that he cannot find the artery outside the pelvis. But when the artery is accessible the old operation or that of and should be practised according to the size and extent of the tumour.

7. Ligature of the internal iliac is liable to failure in cases of spontaneous aneurysm for discand condition of the coats of the artery and should always be avoided when other means of treatment are available.
with regard to the last warning. Amundsen, in an article in Meddelede 1886 Volume XIII, points to the "treatment of surgical aneurysm by the old operation" that "it may be said, and it has been said that if the arterial system is unhealthy, it is most likely that the artery in the region of the aneurysm will be especially affected and unstable for ligation. But Syrme proved the fallacy of this in connection with his brilliant operation and having myself performed many dozens of this kind I can confirm his opinion for I have never seen secondary hemorrhage occur where the old operation has been performed with care and under antiseptic precautions." Loomis, however, in his lifetime of arteries, page 3, referring to exactly the same point, says "Lastly the pest will he all probability be dissolved at the point of ligature."

On such a matter of fact as the state of an artery in this relation, the immediate justification of these opinions is a warning to me of drawing any deductions. But be that as it may, though I hope to be (to quote Oliver Wendell Holmes)

I do not to flatter too hard to meet
And only just when seeming severe,
I will at present stick to the opinion of my
School and ask you for your own discretion as well as the pedantic academic expression for the University and one of its Professors. In the management of an emergency in any locality, the pulmonary treatment of rest and pecurhurency must be taken for granted and if it be dealt with insensibility locally, we then endeavor to ensure coagulation with subsequent preclutrition of the blood in the face to be eventually record by absorption.

Through the success attending the insertion of the exploratory needle in the case I have recorded by inducing coagulation I had anticipated as if were the means of coping with the case as I pleaded of you Holmes but as I intend to deal seriatim with the world I will consider how I succeed under his guidance & of where he refers to holings puncture. Forably desulting as I looked upon the needle as a foreign body reducing coagulation.
Treatment "continued"

1. By Compression

By this term as applied to debilitated persons is meant rapid or gradual, abrupt or instrumental to common lines of action. Of direct pressure I shall have a little to say further on as it was most during the progress of the case. Mr. Tunneley Holmes in 1844 proved compression with gradual reduction as being fraught with most interest and promise creatively. He cited Daubré's and Symes patients to show that it was not necessary to resort in every case to dangerous methods and as an additional caution, and to strengthen his position in that point my case that has been narrated may now be mentioned.

In this patient it was not however, attempted though after we saw that there had occurred, secondary calculaneous haemorrhage it was theoretically speaking applicable. But the difficulty of having it practically and properly supervised (as to succeed it must be regular, efficient and equal) was insurmountable. had the young man been in an Hospital in the charge of trained attendants and the treatment carried out with minute care and attention in every detail. Essential
to its successful application I think I would have been most amenable to its use and that I would not have to resort to the enucleation of the hæmorrh. It is a laborious plan for private practice especially in a country district and though the case was ever so suitable and the surgeon ever so willing the time and attention could not be devoted to it.

Dr. Murray in 1841 cured an abdominal aneurysm by pressure and were there the so-called Dublin method named after Todd, Hunter and others who adduced evidence of its scientific and practical value has been considered sound in theory and safe in practice. Dr. Murray said the principle on which it rests is the complete stagnation of a mass of blood in the aneurysm till it coagulates.

But though Holmes regardedGluckt Aneurysm as amenable to compression unless by neglect its growth has rendered it unfit for such. Still he is careful to say in another article in discussing compression as applied to prærenal and femoral aneurysms that there are risks attending it and ought to be weighed against the danger of the disease and other methods and that the
Striking cases of cure that have been published have attracted more attention than the instances of failure.

And again in writing on Edible Anemones in Braithwaites Volume 4 XX July 6 Dec 1874 the same authority points to considerations that are so important and so much in point that I will introduce them. He says "not with one imperfect seen you cannot expect the same results as if I were firm and contracting for you must have both coagulation of the blood and contraction of the one upon the blood.

Still granting the absence of irritability and edema on the part of the patient and insidiousness on the part of the parents or friend who should second the intelligent superintendence I think it would have been very desirable in this case as a tentative measure especially as I said before after the first clotting and to prevent a recurrence of the secondary cutaneous hemorrhage.

The how long compression should be tried before resorting to other measures I will not enter at length as this point is traversed by W. Holmes in Braithwaites Vol 4 XX July 6 Dec 1874 page 257 where he satisfactorily the question that he says can
only be answered at very general terms
by the reduction's reply - "a very mature
trick which is finally extended and made
definite by calling it a work"
The therapeutic uncertainty of Electricity has say a certain writer passed into a prosel. This is according to De Watteville (appendix to the second edition of this work on Medical Electricity) to otherwise able physicians and surgeons playing with it in the treatment of disease and to the utter hopelessness of arriving at any conclusion without having proper method of measurement and a thorough acquaintance with the laws of Electricity.

The table that was to encircle the globe according to England's immortal land and then now spans continents and lands, oceans has been as far as I can gather only used in one case of Glacial anaesthesia and I cannot help thinking that if an attempt in any case could not be classified with these therapeutic incantations that De Watteville refers to and believe that beyond the shadow of a doubt that the transmission of a current through the needle that alone induced anaesthesia must needs be to enhance the value of
the puncture.

Byron Braamwell (Diseases of the Heart) quotes de Wakefield when dealing with the treatment of thoracic aneurysm, and as these authors are both entitled to much respect in their respective labours can not do better than draw from them as to the method in which Salmond and Dundie thought the case could.

1. To complete the whole contents of those at one sitting.

2. To form a small pine clot which will act as a nucleus on which layers of Coagula will be subsequently deposited.

I have seen Dr. John Duncan use it in anotic aneurysm after a clinical claim in his wards and heard from him in his lectures about the work of Ciminielli and others and in forensic parlance from information received I feel strong of the opinion that had a current of considerable strength been passed through the lesion it would have been first fadestite and the prophesy of Mr. Holmes would have been fulfilled as to the
value of Electrolysis in Cushing's aneurysm.
I cannot allow myself to say any more
upon this branch of the treatment as
briefly, prompt me to abridgment but
lest it should be thought that I am writing
above am not conversant with the
chief dangers that may under a reforms
issue I will mention them.

a. Inflammation of the wall
b. Surfacing its way into circulation
c. fickleness of femoral

To say any more would require
prologue the paper though I have
gathered many interesting facts
from several articles in Brachwalt's
beginning with those of Duncan assisted
by Frazier in 1866. 1867 when these two
gentlemen took up Electrolysis and
made these experiments in relation to
aneurysm that have turned out so
useful to the medical world,
for the sake of coherence I need it seeming
to add what Holmec said in 1872 viz.
"pass over the plan of introducing a mass
of iron wire into the sac of an aneurysm,
as practised by W. Moore with much less one will deny that it is not more certain than salve and fumiture while it is far less likely to cause inflammation in the case. Since W. Moore's death it has been twice repeated by Dr. Murray of Newcastle in a case which terminated by suppuration of the ear and by W. Dunmore of Galston without any definite result.
By injecting injections

I think I need not detain you with any
lengthened reference to this but as it was made
mention of by Dr Holmes in his paper on
Treatment it will be in keeping with the
preceding paper on the subject of it. In 1874 Dr
Holmes was not opposed to giving it a trial
as though the evidence of success was
wanting the evidence against it was
also unsatisfactory. Bucci's case was
too incomplete, Lequesne's case related by
servier was misunderstood and Campbell's
case had only one injection tried. But
though Holmes then said "I am not opposed
to it on the contrary I advocate it" still I
think it does not at the present time
happen to be supported by Surgeons of
authority. In several Bradlewaites
have looked into I see no preference to
it either in anxiety or generally or in
Gubeck's anxiety particularly if we
exclude cases of anxiety even in which
it has not been without its failures
as West's article in Bradlewaites 1874
January to June with ample testimony.
In Bryant's Manual of Surgery, it has a powerful influence in causing coagulation but to produce this in the ace of an aneurysm is a most dangerous proceeding. The most dangerous process is aneurysm, and the next inflammation and collection of the ace.

Holmes, writing 10 years later than as quoted before say: "That it is written from a danger can by any means certain to cure the disease",

so that on the whole I am of the opinion that the most dangerous verdict now in a case of affection rather than of further attempting this method of cure, or if done it may be as a last resource when all other available methods have unsuccessfully attempted,
Neatness contained

By operation

Firstly, the Hunterian method.

Secondly, the method of Radcliff.

Thirdly, the method of Holzmeier.

Hunterian: This is generally used in the practice of cases where it is said (reputed by Accaudale as already quoted when he was arguing in favor of perpetuating the old operation) that the artery will be healthier and better suited for obliteration at a distant part than at the seat of the aneurysmal dilatation.

But the ligature of the common cliae I find has a mortality of 76% and in eleven cases where the external cliae had been tied only six recovered.
But the principal reason that it should have not been done in my case was as pointed out by Holmes in his College Lecture viz that aneurysm with enlarging and ruptured sacs should not be so treated but either the method of pack or the old operation performed.

In spite of all however if the pain and increasing size of the aneurysm could not be subdued by other means and if one were obliged that the opening of the vessel was extra-pelvic and could not be secured externally the Hunterian was the only recourse.

The Method of O’Hare:
The objections to its general application as urged by McDermott are so pertinent to the present case that I will pass over it and merely mention the circumstance.

The Method of Antzillus:
The old operation was at one time contemplated by me when the course of the boy’s case showed
that the anaesthesia was increasing and when the pain was almost beyond endurance. But happily it never went beyond contemplation as at this critical juncture the medical ship nature helped us and prevented me from wishing that I had lived with Ambrose Park before the circulation of the blood was discovered by the great Harvey or with the Lethologers of the 16th and 17th Century who cut in stone to learn their anatomy of the parts concerned in the operation.

In Broadwood Jan 8th 1873 Holmes discussing the prospect of introducing the old operation as urged by Syme mentions instances of failure that could not fail to touch the heart of an ordinary practitioner and to turn with fear if he had to attempt such a proceeding for example Decastel undertook an articular aneurysm and not being able to render himself master of the precedent had the misfortune to see his patient expire under his eyes immediately after he opened the Scarphe regard the jet of blood that flowed where the sac was opened as "violent and dreadful". But then
that surgeons had not thought of tying the nerve with the band while the chaos of broken corugula was preserved to the vessel secured. In Mr. Joseph Bell's Manual of surgical operations he gives in his Syner's own words the way to operate. He also refers to the hyperbolical language of Mr. John Bell who admired an incision too long. But on the assumption that sufficient skill and address could have been found among us the case would have furnished an admirable opportunity to emulate Bell, Guthrie, Syner and others in their brilliant surgical exploits when performing the old operation.
Remarks

We don't especially worthy of note in this case is the manner in which care took place. There are many other interesting factors at it as well put it cannot be gainsaid that the central idea or one that may be regarded as unique was the excretion of the clot without aspiration or hemorrhage and the healing up of the large excision afterward. As far as I have kept on course with what I could do as if I had been born to my lot. I have for such a manner of care and though we all know that the experience of a single case is too little to justify any general conclusion still I would never think of trying to steer a middle course between the Scala of believing too narrowly and the sceptic. I am in the belief not at all by them and this plan to be tested in another case of the utmost to Glukad or otherwise but rather place it on record without any mental reservation whatsoever as a singular example of the love of curative or healing tactics in which nature will sometime indulge. Nature we know is a good physician for a bad surgeon and here we have the exception I prove the saying that there is no...
rule without an exception.

This Dean of the faculty of medicine is my thesis completed on the brief interval of days without leisure as a collateral practice may be well designated and I trust that I have picked out from the many treasures I have consulted that which is needed in such a compilation and batted with it intelligently and at least declared enough to earn for me the degree of M.D. while at the same time to slightly alter your Wendell Holmes who made

Crack my reflecting thing
Gather up my intellectual files
Made my mental Reid so fast
Remember that I have global information

owe the Rev. Edin: 1882.

[Signature]

owe the Rev. Lond: 1882.

[Signature]

[Postscript]

[Signature]

New South Wales
Australia.