Gooding's Theses

1861
The Importance of Position in Medical and Surgical Practice

I shall endeavour, in the following remarks, to illustrate the importance of position in relation to medical and surgical practice, and for this purpose, I shall comment on certain subjects which have from time to time occurred to me. Without further preface therefore, I shall proceed at once.

Statistics show that of all children born head foremost, one in 33 is lost, while of those which are born with the pelvic extremity first, that is, when the long diameter of the child still corresponds to the long diameter of the uterus, in a position regarded by Phipps as natural—one in 333 is lost. From this immense difference in the mortality is mainly due, to the position which the fetus assumes in the latter case, exposing it to certain dangers, which however, it is not necessary here to enter into. Now, the fetal head comes to occupy the position it does, has been a subject of great controversy; but be the cause of its occupying this position, as it may, in no case perhaps is the mechanical adaptation which is so wonderfully displayed throughout the human fabric, more strikingly shown than in this adaptation.
of the fetus, with its head so placed as to be the 
first part which travels the maternal passages; 
and the results which follow from a change in 
this presentation, even for one which is classed by 
some as being natural, afford a striking instance 
of the influence of position in determining life or 
death. Further, the depending position 
which the head occupies has been suggested to have 
an important bearing on the constitution of the brain. 
For, says Mr. Hilton, it strikes one that the cerebro-
spinal fluid contained within the internal arachnoid 
performs the very important office of supporting the 
membrane [internal arachnoid] and this constitutes 
a scaffolding or internal arch upon which the pia-
mater deposits the fluid brain-structure. The mechan- 
ical function of the cerebro-spinal fluid may be aided by 
gravitation, and probably this may be one of the reasons 
why the head of the fetus occupies a depending position 
within the uterus; but Mr. Hilton (not being an 
Obstetrician) has however overlooked the fact that 
this depending position of the head is not assumed 
till during the last month or two of gestation, that 
is— at a time when the brain had acquired its 
definite form, and had nearly reached full 
development.
As an aid to forming a correct diagnosis, the consideration of the position or position which the patient occupies, should by no means be thought of. But more important still is it, to pay attention to the position in which we place the patient when about to institute certain physical examinations; by doing so, we shall be able in many cases to arrive at correct conclusions when otherwise it would be impossible for us to do. For instance, in examining the abdominal or pelvic organs, how constantly are the manipulations conducted with the patient lying on her back, the head thrown back, the knees and limbs extended; and consequently the abdominal muscles all put on the stretch, simulating in many cases tumours, or enlarged liver or stomach? Whereby, if the shoulders and head be raised and the thighs flexed, the peritoneal ligament, to which the majority of the abdominal muscles are attached, is no longer pulled down by the fascia lata, but is relaxed, and the trunk being somewhat flexed the insertions of the muscles are approximated and the abdominal walls are made flaccid; and we may then explore with anatomical precision parts of whose condition we could not before have formed the slightest idea. This is strikingly observed in
The examination of the pelvic viscera - the patient placed in the position indicated, the uterine may be grasped between the finger of one hand in the vagina and the other hand externally, and the slightest enlargement of the organ be determined. This mode of examination is in fact the only means of determining positively the existence of pregnancy in the early months; or of detecting the presence of small fibroid or ovarian tumours; but let me try to feel the fundus when the patient lies on her back with the lower limbs extended: it is impossible to make out anything through the thick and tense recti.

Diagnosis is often greatly assisted, and sometimes may alone be made, by attending to the position assumed by patient. Thus a patient the subject of peritonitis will lie with the shoulders elevated by pillows, the thighs and legs bent up, and steadily maintain this position, so as to obviate every fibre in order that the inflamed and tender peritoneum might be relieved from the pressure of tense muscles or from that produced in change of posture, by the gravitation of the viscera - how different from the posture of the patient suffering from colic or griping! During the present
winter there happened to be in a ward of the Infirmary, at the same time, two patients who prominently illustrated this point. On one, an operation had been performed; after a week or two cellulitis and limited peritonitis subsided; the other, had indulged too freely in pudding (at Christmas time) and had violent diarrhea, grippeulce, so violent was the action of the bowels that the fecal matter was expelled while she was rolling about from side to side in bed shuddering from pain. The one may almost be said to have died with the other in the lungings of her ones; but the former maintained more or less on the position indicated before, and only deviated from it when an attack of vomiting came on—in both there was vomiting, in both quick pulse and other febrile indications, in both did prepare on the abdomen slight some amount of pain—but the position assumed by the one was quite different from the rolling and tobring about of the other sometimes the detection of impurities, as in cases in which the joints are pretended to be affected, will be rendered easy by observing the position in which they hold the limb, in their ignorance of the natural laws which regulate
the position of a diseased joint, they will hold
the limb extended, and pretend, that it can't
be bent, or on your attempting to move it, that
you cause them considerable pain; whereas
the very fact of the joint being in a state of
extension is sufficient proof of its integrity;
for a diseased joint is always found semiflexed,
in a position voluntarily assumed by the patient
in obedience to the dictates of nature.

Position occupies a high place
among remedies in the treatment of diseases, particu-
larly of those affections which are more especially
surgical in their nature. For instance, in the
treatment of abscesses and of abscesses, after the
Evacuation of the pus, it is very essential that
the opposite walls of the cavity be able to be brought
into apposition and be kept so. With this view of
obtaining this result, the first point which is neces-
sary in the treatment is the evacuation of the pus
by an orifice that will allow of the hole to how-
away spontaneously and prevent accumulation
of matter, which would otherwise mechanically
keep apart the walls of the abscess; this opening
must be made with due regard to the position
which the patient is to occupy; for what would be
dependent in the erect position may not be in the recumbent. To bring the walls of the sinuses or abscess (or wound whether surgical or accidental) into contact and maintain them so, we must call to mind the connections and relations of the muscles of the part, and by suitable position maintained if necessary by mechanical appliance restrain motion and counteract the tendency of spasmatic action to tear them asunder. Without this precaution the semi-involuntary movements of the patient, or the spasmatic twitches of the muscles, (some one or more of which, always influence every wound) will surely frustrate the attempts practiced to repair the breach.

All important is "position" in relation to fracture, from the moment of its occurrence up nearly to the complete restoration of the normal continuity must attention be paid to this point. In the reduction—unless we take especial care to manipulate with the limb in such a position as to relax the muscles, their antagonistic influence will in many cases effectually oppose our efforts to bring the broken ends into opposition: And in other cases, even if we do succeed, it will be at the expense of con
considerable suffering to the patient, and by the em-
ployment of much force which can be no
otherwise than injurious, lacerating and ploughing
cup as the broken ends meet, the soft structures
among which they are made to move. The extra-
ble reduction offered by the muscles may be always
counteracted by relaxing them by position; and
so soon as this is done the bony fragments will
naturally fall into place; but no amount of
extension and of counter-extension can get them
into position unless all muscular influence be
removed. In fulfilling the important in-
dication of retention—maintaining a right posi-
tion of the limb—will constitute the chief ele-
ment in conducing to that end. Indeed some
fractures may be treated by attending to the position
of the patient alone; for instance, fracture of
the clavicle; by making the patient lie on his
back, or a firm bed, the broken ends will
readily adjust themselves; but this plan of
treatment is for obvious reasons not usually
adopted. Fractures of the patella, again, require
much attention to position and kind for their cure,
although perhaps for no fracture have such form-
dable instruments been invented, as the horse...
which have been used with the view of forcibly approximating the fragments. In the majority of cases of fracture however, mechanical means must be employed to restrain motion and to oppose spasmodic muscular action; but even then, by attending to the position of the limb, simple appliances, which are always at hand, will be found quite equal to the object in view, and costly undiagnostic apparatus be avoided, as well as the least formidable, but often mischievous employed, pads and compresses. Even in the present advanced state of surgical science, it is not uncommon to see in the wards of an hospital cases of fracture united, but with the limb in such a condition as to be of little use to the patient, and certainly of no credit to the surgeon. Hence, the practice layed down in books and one which ever and anon consulting surgeons have to follow, of breaking and setting the bones in order to obtain that which, had common sense been used and care in maintaining the limb in proper position taken, would have followed the primary injury.

In the treatment of fracture or disease of the vertebra, especially of the cervical, attention to breath
is of the highest consideration; first, with the immediate view of saving life, and secondly, to afford nature time to repair the injury. In many of these cases the respiration is more or less affected, and before the case is made out these patients have their trunk elevated by pillows with the view of achieving their breathing, an object in no way obtained by that posture, while at the same time their life is exposed to considerable danger. Dr. Hilton was accustomed to relate in his lectures some very interesting cases bearing on this point. He was asked to see a patient, in one of the medical wards, whom he found to be in an extremely dangerous state; she was "almost pulseless, in great distress of breathing, with loss of voice, an inability to swallow, paralysis of arms and legs nearly complete." In consequence of a great increase in the difficulty of breathing and deglutition, she had been placed prised up in bed, but this position did not relieve, indeed it rather aggravated the symptoms, for the relief of which it had been employed. Having carefully considered the case, and come to the conclusion that there was a lesion between the first and second cervical vertebra, the
was placed on her back, with a support under the hollow of her neck and lateral supports to the head, with a very speedy relief from the sense of suffocation. In this position she remained six months, after which she was allowed to rise a woman, at first rescued from impending death, and restored to complete health, with the exception of a stiff neck, which, the nature of her disease and its cure, rendered unavoidable.

In strong contrast with this is the result of another case, which he also used to mention in his systematic course (and which, along with the foregoing has been published in his recent lecture delivered at the College of Surgeons of England). In this case, disease of the cervical vertebra was made out; the child was placed on her back, with the head supported in the position as above, and was ordered to be so kept; in a couple of weeks, at the command of her nurse, the child rose to take her breakfast, her head fell forwards, and — she was dead. Had the position in which she was placed been maintained, there is every probability that the result of the case would have been scarcely less favourable than that of the former one; for already marked benefit
had been derived from the treatment.

The consideration of the relative position which individual parts of a limb bear to the neighbouring parts of the trunk, and the position of the whole limb itself, is an important element in the diagnosis of dislocation, in an accident in which early diagnosis too, is of such immediate consequence. In fulfilling the first indication of treatment also, by attending to the direction in which force is applied, the reduction is greatly facilitated. In luxation of the first phalanx of the thumb, a dislocation which at first sight one would expect to offer no difficulty in reduction, but in accomplishing which great difficulty is actually experienced even though the patient be under the influence of Chloroform, I have seen, after the repeated but vain endeavours of one surgeon to reduce it, another surgeon, by replacing the bone in that position which it must have occupied at the moment of its escape through the rent in the capsular ligament, by forcibly bending it backwards, suddenly effect reduction, by their suddenly bending it forwards. If this method be adopted, embrace one or the alternative of leaving the dislocation unre-
duced will be avoided. It is probable that if care be taken, in the reduction of these dislocations, to make the head of the bone retrace the path which it must have taken when forced from its normal place, great facility in reduction would result; this may always be done by investigating the manner in which the accident took place, and the position of the patient or part at the time of its occurrence — for instance, the dislocation above alluded to, usually occurs from the patient placing his extended fingers and thumb on the ground with the view of saving himself from a fall; in this way the thumb is forcibly bent backwards and dislocated, and as I have above said it is by first imitating the mode in which the accident occurred in attempting reduction, that this is most easily accomplished.

In the subsequent treatment of dislocations, after reduction has been effected, it will be necessary to maintain the bone in its normal place, for this purpose, the recumbent posture is absolutely required for those of the lower limbs, and for the upper the application of light splints and bandaging, so as to maintain the component parts of the joint in such a position as to restrain motion, and afford security against any possibility of
repairing the injury done to the structures of the joint.

In the treatment of ruptured tendons—as for instance, ruptured tendo Achillis—the position in which the limb is placed will make all the difference between a sound and strong, or a crank and weak limb, for it is evident that if means be not taken to approximate and keep in apposition the ends of the severed tendon, though a median of union be formed, yet it will be so long as to render the limb very weak and inactive, whereas by the use of simple means, restoration of continuity will leave the limb, a little stiff perhaps at first, but after a time, in no way impaired in power. It is by acting on the opposite plan that the surgeon is often able to remedy deformity, as in the case of club-foot: by dividing the three tendon he elicits to, and keeps in the normal position the foot until by the reunion of the tendon, by the interval between maternal, the required increase in its length is obtained.

In the treatment of inflamed structures it is of great importance to place the part in such a position that the venous blood may have its return favoured, and more especially that the arterial current to the part may be assisted...
In this way, not only is the patient rendered more comfortable, being freed from that tenderness which always accompanies inflammation when the part in which it is, is lowered; but also the subsidence of the disease is favoured. In the case of a limb, elevation by proper support must be adopted; if it be the heart that is inflamed, a bandage round the neck; or if it be the testicle, a pillow between the thighs; (the patient being in the recumbent posture) will afford the necessary support. The comfort and freedom from pain, afforded by such treatment, even in the latter cases, although evidently the elevation is but slight, is by no means inconsiderable, and although pain has been said to be salutary yet except in presence this can scarcely be maintained.

That it is an important manifestation in life cannot be doubted, for it draws the attention of both patient and practitioner to the existence of a diseased state, which in its absence would in most cases not be detected until serious damage had been done to the part, or life itself endangered or destroyed. When however it has done that, it has fulfilled its object and
and it should then always be possible to dismiss by appropriate means—alas a messenger from nature whose presence is no longer required.

That the elevation of the part diminishes the influx of blood to it, is evident from what we see in cases of syncope, the readiest means for reversing the patient from which, is by depressing the head, so that the flow of arterial blood to the brain may be favoured. From the result produced by this, may be deduced the practice of elevating the head in inflammation of the meninges, eye, or external parts of the head, which would necessarily produce the required result. In cases of extreme anemia, as that which exists after an attack of fever, syncope not infrequently follows the assumption of the erect posture, this gives us a severe experiment, and further illustrates the influence of position in determining the flow of blood to and from a part.

In arresting haemorrhage, especially if the venous kind, elevating the part is almost always sufficient. Several times when Dr. Pepys, it happened that patients were brought to the hospital, in consequence of the haemorrhage attending
The rupture of a varicose vein: the bleeding which had been, and was, fairly considerable, was readily stanched by placing the patient on his back and elevating the limb. The same plan of treatment is often available after operation on the limbs, when the bleeding may even be from small arteries, as those of the fingers; the arm being suspended, by a piece of bandage to the top of the bedstead, the force of the heart is taken off the arteries, by its having to propell the blood up hill, and thus the contractile power of the arterial coats is enabled to come into play and obstruct the orifice — a few minutes' elevation being thus often sufficient permanently to arrest a fairly smart hemorrhage. In no case of hemorrhage however, does position have such great significance, as in post-pArtum hemorrhage, in not a few cases has life been destroyed, by the substitution of the sitting posture, while had recumbency and quiet been preserved, the flood-gates of life would not again have been opened and home fluid allowed to escape. When the patient is recumbent, the action of the heart is much less powerful, the pulse is reduced in frequency, by several beats, below what it is when
the patient is standing or sitting; and the gravitation
and pressure of the column of blood in the valves of
the inferior vena cava is taken off the feebly contracted
uterus.
In severe cases, recumbent posture must be
maintained for weeks, for many patients have
died from rising, even to micturition, before they had
sufficiently recovered from the loss of blood.
Dr. Tyler Smith says he has found by tendency
to syncope present, when the patient lies on her left
side than in any other position; this I think may
be explained by the anatomical disposition of the
heart, and its tending to gravitate to the right when
the patient lies on her right side, which would
doubtless impose additional labour on its walls for
it would probably first recover its position as the
uterus does, in contracting. This too seems a probable
explanation of the fact that most people sleep on
their left side. In the "game of life" therefore which
we play in cases of post-partum haemorrhage, "no
card is so important" as position.

In the treatment of uterine diseases "recumbent" is one of the chief means which is at the disposal of
the practitioner, for instance in threatened abortion.
The abnormal process may often be arrested by seda-
tively enforcing recumbency. In menorrhagia,
Unavoidable and accidental hæmorrhage, this pain is urgently demanded. And in the reduction of some dislocations of the uterus, as in retroversion, Potham readily replaces the organ in its normal position, by placing the woman on her elbows and knees and allowing the vagina to be filled with air, by separating the vulva with the fingers; and then if mid it, raising the fundus.

In the case of ruptured hæmorrhage, by bending the knees together immediately after its occurrence, and making the woman lie on one or other side, adhesions will, except in those cases where the uterine wall is torn through, take place and subsequent operation be rendered unnecessary.

In medical practice it is customarily

say that, when any particular complaint has been reported to be cured by many different drugs, the very fact of so many and different medicines having been recommended as successful, is a proof of the difficulty of finding the particular medicine to combat or cure the particular ailment; by the same law we may estimate the difficulty of the successful treatment of protracted umbilical cord, yet it would seem easier than to push up the cord and retain it above the head, but in practice,
the difficulty of accomplishing this, has for years been felt and ever and anon new methods of treating this troublesome complication, of an otherwise natural labor, have been recommended, each successive plan proving scarcely more successful than the last; lately however a plan has been recommended which in simplicity far exceeds any yet proposed, not excepting the ingenious device of Michaelis, and in the attainment of the desired end exceeds much and is inferior none of consists merely in placing the woman in her knees and elbows. In this position gravitation exerts its sway, and the cord falls back assisted sometimes by a push, into the cavity of the uterus. Maintaining this position for a while, the uterine contractions propel the head into the pelvis and renders the redundant of the cord impossible — and thus a human life is rescued from imminent peril.

Of all causes which produce ulcers none can compare, in frequency and festivity, with the rect position which the position of the labouring man, whose leisure for the most part ulcers are, compell him to maintain. In the great majority of those ulcers
that are not due to a constitutional taint, which come before the practitioners, the site they occupy is just above the ankle; this is usually said to depend on the fact that this part being so very distant from the centre of the circulation, but evidently there must be some other reason for their occupying the extremity of the leg, seeing that the foot, which is still further removed from the heart, is comparatively rarely affected.

The accessory cause would seem to exist in the anatomical arrangement of the blood vessels. The blood from the foot is mainly returned by the anterior and posterior tibial veins—vessels which are supported by the muscles among which they lie. On the other hand, the blood of the leg is returned by the saphena veins, which communicate with the deep veins at and around the ankle joint, and scarcely, if at all, at any other point except of course at their termination in the popliteal and femoral veins. The saphena veins wanting therefore the support which is afforded by the muscles to the deep veins, their valves yield to the continued pressure of the blood, a pressure which their great length, their scarcity, communications with the deep,
and the seat portion especially favours; as a consequence of this, congestion of the venous radicals results and this congestion is most evident at that part, from which the blood is collected by their ultimate tendo, i.e., just above the ankle.

The mechanical influence of the gravitation is further seen in the fact that the inner aspect of the leg is the most frequent site of ulcer, and it is from this part that the internal or long saphena vein returns the blood; while the external surface is drained by the short saphena. The congestion which is thus caused may, in some cases, be seen to exist as a brownish discoloration for a long time before any breach of continuity occurs; but on the receipt of some trivial blow or a part so vitally weakened, inflammation supervenes, an ulcer is formed, and present, according to the external conditions and circumstances in which it is exposed, the characteristics of one of the recognized kinds of ulcers.

In the treatment of such, he will best succeed who, recognizing the primary cause in the dependent portion, causes the patient to maintain the recumbent posture and to elevate the leg. It is not enough to have the patient...
lying in bed; one end of a board must be inserted
beneath the foot of the bed so as to elevate that
part and form an inclined plane, on which
the leg may rest. This position alone will succeed
in allaying nature to cure a complaint which
may have existed for months, and defied blisters,
ointments, and lotions, without number.

In Surgery, it is a fundamental rule to
remove, if possible, the cause of a lesion, and then
to adopt means to facilitate nature's operations
in effecting the desired result; but very frequently
this rule is quite forgotten in the treatment of
lesions. Some lotion or ointment is ordered, after
a certain course, and if the patient is confined,
or confines himself to the house, he sits with his
legs pendulant, or at the most rests them on a
table. The return of the blood is thus in no
very facilitated, the congestion continues to feed
and nourish the unceasing fire of ulceration, and
ointment is changed for ointment for lotion,
but all is vain.

In a great many cases, the elevated position of the
leg cannot be obtained, as it involves the sacrifice
of time, which to the poor is bread, and that cons-
stitutes a great drawback in the successful treat-
ments; and we are therefore obliged to content ourselves with stropping and lotions. But when we look at the mode in which such applications act, we find it to be on the principle of diminishing the tendency to produce congestion of the part; for most of the lotions used are composed of astringent compounds, which, congregating and contracting the vessels as they do, produce a physical impediment to the distension of the part with blood, which is an important element in the production and maintenance of this affection. But more positive, although more evident, is the mechanical action of stropping. These applications tend therefore to prevent the accumulation of blood in the part by their local action, but this is not removing the primary cause of the disease: the capillaries and venous radicals are congested because of the defective condition of the vascular apparatus of the veins; hence it is obvious that the treatment should be directed to the restoration of the integrity of the veins; and the chief means of effecting this is to place the limb in such a position that the blood's onward progress in the veins may be facilitated and prevented backwards in the vessels to be taken away. The cause which first predis
laced to, and afterwards kept up. Ureterin being removed, the ureter will cease and separation will commence, and its parts may then derive assistance from applications which science and art suggest.

Occasionally, it happens, that in patients suffering from calculi in the pelvis of the kidney, the stone, at a certain stage, becomes impacted just at the entrance of the ureter, obstructing the flow of the urine; the secretion of this continuing, soon the pelvis is filled, then distension begins and with it pain, which in a short while approaches to agony and urgently demands some treatment for its relief. This may be afforded by the simple device of inverting and shaking the patient—this causes the stone, by its own weight, to fall back into the now inverted pelvis, and thus free the ureter from obstruction. Dr. Simpson mentioned a case, in one of his lectures, where this treatment was adopted. He says, some few years ago, he was asked by a gentleman to see his sister, who was suffering intense pain from a calculus in the kidney. The pain had suddenly supervened—he could not go but sent his assistant, directing him to lower the lady's body over the side of the bed, and while in that position to shake her well. This was done, and the assistant returned greatly surprised at the result of the treatment; for
complete relief had been afforded. The calculus had evidently gravitated backwards into the pelvis. There seems to me however an objection to this plan of treatment, and that is, the probable increase of age which the stone would undergo, which would necessarily render its ultimate passage down the ureter an impossibility.

Inverting the patient is also sometimes of use when a foreign body has gained entrance into the windpipe; but this treatment should be rarely adopted, before tracheotomy at least has been performed, lest violent continuous expectorating action of the laryngeal muscles intervene, and cause asphyxia.

It is not my intention to comment on the importance of attending to position in the performance of surgical operations in general, since indeed it would be a tedious task. I shall content myself with a few remarks on two procedures which, although not involving the use of the knife, are nevertheless important surgical operations.

And first with regard to the oesophageal bougie or, spitting, and tube, instruments which the surgeon is occasionally called upon to use. We are told, that if the patient is susceptible he is seated on a chair with his head thrown much back, so as to bring the upper part of the alimentary canal into as straight a line as possible, and then to proceed to pass the instrument. Now it seems to me, that this position is objectionable on one or two grounds. By throwing the
head "much back," we put the larynx and trachea on the stretch, and thus compress the oesophagus between the windpipe and the convex surface presented by the vertebra; and this would obviously tend to impede the introduction of the probang. With a view of facilitating its introduction, however, we are told that "when the instru- ment is opposite the vocal glottides, the patient is directed to make an effort to swallow his saliva; or, with the left hand, the surgeon raises the box of the larynx, and at the same time pulls it gently forwards from the oesophagus." This recom- mendation is made it appears, with the view of overcoming a difficulty, which it seems tome has been produced by the extension of the head. The act of deglutition, which is advised to be made, would compel the patient to depress his chin (for it is scarcely possible to swallow with the head for- ward), and this would necessarily cause a diminution of the convexity of the cervical spine, and of the tension of the windpipe. While the manual removal of the larynx forwards from the oesophagus, would also more evidently take off the pressure from that canal, and conduces to the easy passage of the instrument.

The chief point in the introduction of oesophageal tubes and bougies, is to avoid perforating them into the air passage, and perhaps it is principally with this object, that the head is thrown back; but I question whether such a position of
the head, does not render the introduction of the instrument into the larynx, a more probable occurrence. The instrument would be less likely, I think, to curve upon itself and enter the larynx when the patient was looking straight forwards, than if the head were thrown back; for in this latter position, the vocal glottis, which in the flexed state of the head is immediately below the angle formed by the pharynx and mouth, would by the straightening of this angle (in extending the head) be brought more in the way of instruments being down the throat, and be nearly as likely as the oesophagus to be the canal along which the instrument would find its way. In a case, and the only one, I have had an opportunity of probing either of these instruments, I always found the tube to pass more easily when the head was held in the position it occupies, when one looks straight forwards.

In the ordinary way of applying the testis with the view of reducing hernia, the position in which the limb and patient is placed, will materially influence the result of the attempt; thus—by adducting and rotating inwards, and at the same time flexing the thigh and elevating the shoulders, the abdominal wall is relaxed as well as the abdominal walls, and the access of the hernial protrusion (femoral) is greatly favored. While if a disregard be had for these points, the attempt at
suction will scarcely be a successful one. At the best, however, the basis is but a clumsy mode of treatment to try, we are indifferently to push a flaccid coil of intestine (or omentum) through a comparatively unyielding orifice, and this on consideration and experiment will be found not an easy matter. On this account, the suction of strangulated intestine has been proposed, from time to time for many years past, to be effected by inverting the body so that the intestine may gravitate towards the diaphragm and exert traction on the contracted portion, a plan of treatment which in theory certainly has a greater element of success in it than former; for we all know with what facility a flaccid object may be drawn through an orifice, that no force from behind would cause it to traverse.

Physicians have taken advantage of this fact, and by acting on it, are frequently enabled to save a child's life, and to avoid the dangers which a severe operation would entail on the mother. Allude to the operation of turning as a substitute for caniniotomy and the long forceps” in cases of contracted brain; in which the uterine efforts are unable to propel the comparatively flaccid head, through an orifice; that the same head is made to pass by when traction is applied to the child's body after version has been accomplished. In practice, too, this method of reducing hinia has not unfrequently succeeded after the employment of the
taxis, as ordinarily applied, in conjunction with the rescuing adjuncts, has failed and when an operation by the knife seemed to be inevitable. Further, in one or two cases nature has seemed to have dictated the inverted position as the one best suited for the reduction of the mass, for patients have been found voluntarily to have assumed that position. It has been said that the inversion of the patient is not a very delicate procedure, nor indeed is it if done in the mode that has hitherto been followed, viz: by placing the patient's legs over the shoulders of a man who stoops to receive them. Possibly this, together with the disinclination on the part of the surgeon to adopt as common place treatment, is the reason why the influence of gravity has not been called to the aid of the taxis more frequently. But in comparison with the positions demanded by many surgical operations, this can scarcely be said to be indecent; acknowledging it, however, to be so, surely the possibility of avoiding so dangerous an operation as that for hernia, is, in some degree, counterbalance the disagreeables of the posture.

The following position however, I think will be found to be efficient, to escape the charge of indecency, and to be applicable in the case of females which one could scarcely consider the other to be. Let the patient lie on his, or her, back on a sofa, with his buttocks
near the side piece, over which his legs hang; then
turn one or two pillows under the pelvis to as to
ellevate it well; the head and shoulders resting on the
bottom of the couch [ or two or three chairs, in the ab-

dence of a set, will be found to answer equally as well]

On assuming this position, one may distinctly feel
the dragging force, and empty sensation at the pelvis,
caus'd by the gravitation of the intestines. And when
we consider that in many cases of hernia—and those
too which often present the most urgent symptoms—
only a portion of the contents of the intestine is constricted,
and with how little traction after death from within,
such an hernia is reduced, it is very easy to see the
advantage afforded by the position so much neglected.

Besides the traction which is made on the constricted
intestine, this position allows further of the gravitation
of the contents of the loop of gut, and it removes one
of the chief causes of difficulty which obtains in the or-
dinary mode of reduction; for even in the latter, though
we may partially evacuate the coil by lateral compression
(which however in very small hernia cannot be effected)
yet the moment this is discontinued the intestine falls again.
Whereas when the hernial protrusion is made the
highest point of the intestinal canal, its contents would
flow back, and away from its immediate siti.
The bases then, applied gently and for some time in this position, conjoined with a kneading movement of
the abdomen from the pubis, or with occasional succep
tion, would seem to be capable of securing successful
seduction in most cases.

The foregoing remarks have, I think, sufficiently demonstrated the importance of attending to posture and position. Doubtless, there are many more opportune illustrations that could have been ad-
duced, but having during the course of the paper
taken up and laid aside several subjects, I selected
this rather late and have had therefore not so much
time to give to it as probably it demanded.

In my conclusion, however, refer to the great
importance of attending to the position of the pa-
tient during the cicatrization of burns, more espe-
cially when these are situated about the neck;
I have no doubt that much of the horrible deformity
which the contraction during cicatrization, so often pro-
duces, could by proper treatment have been prevented.
For instance, in burns about the front of the neck, unless
the child, for each the patient most generally is, be
placed on its back with its head thrown over the edge
of the bed, with a sand bag under the nape of the neck,
and be confined in this position during the
cicatization, and afterwards be made to wear a well-fitting iron collar for several weeks or even months, the contraction of the cicatrix will certainly tie down the chin to the sternum, exert the lips, and lead to a continual flow of saliva from the mouth, and render the patient a pitiful object.

I have seen this treatment adopted with considerable success: No doubt it is a very irksome position for the patient; and to enforce it, requires considerable firmness on the part of the attendant, but if it be neglected, deformity will certainly result, and even if this be partially remediable by operation, for this to be successful, the same position is demanded during the healing of the artificial wound, as if it occurred naturally.

The use of the iron collar to prevent the depression of the chin is perhaps the most important part of the treatment, while it is also the one most likely to be neglected; for the wound being healed, the patient can see no reason why it should be worn.

John Callender Gooding M.R.C.S.