

twisting it or not as he may prefer; but he will not find such a complete and accessible canal to deal with as in the case of inguinal hernia, nor any such ring to close. It will be but seldom in these cases that silver wire can be used to any advantage; nevertheless if the sac has been properly disposed of the wound will be filled by a cicatricial plug and the relief will be almost if not quite as perfect.

Upon umbilical hernia one may follow precisely the same general method, only modified as required by the surgical anatomy of the parts. Umbilical herniæ in adults are most commonly found in women with pendulous and very thick, fatty, abdominal walls. In such cases, while there seems to be but little external evidence of a hernial mass, there may yet be found a sac the size of an orange, and I have more than once been surprised to find how small the opening into this sack really was. Opportunity for strangulation is increased rather than diminished by so small a ring, and it seems to me that these require radical relief fully as much as any others. In several of these cases I have cut down upon the sac, which is usually, at the location of the navel, closely adherent to the skin, have separated it from all its fatty and muscular surroundings, have opened it and restored its contents according as they were intestine or omentum, have thoroughly extirpated it, have then brought together the margins of the umbilical ring, whether large or small, with catgut, and have then sewed up the abdominal wound in two or three tiers with silver or silk sutures, and have never seen the slightest disturbance follow. I have operated upon an infant but recently weaned, with rapid recovery; also upon a woman four months pregnant, of which fact I was not cognizant at the time, without the slightest disturbance, or apparent tendency to miscarriage. One remarkable case met with in this city, which I propose at some time to report in detail, occurred in a woman weighing 280 pounds, presenting a large umbilical hernia, whose sac, outside the body, was nearly as large as her head, and so pendulous that when she assumed a sitting posture its lower margin touched the chair before her buttocks did, and which presented in its thickness fibro-sarcomatous masses, that were already ulcerating externally, and were giving rise to great disturbance. I opened the sac, replaced its contents, and extirpated the

balance of the whole mass, without her temperature ever reaching 100°, and sent her to her home on the twelfth day following the operation. This shows what may be done even in such aggravated cases. At first, I used to require my patients to wear a truss for a few months after the operation; at present, unless the circumstances demand it, I advise the contrary, agreeing with Mr. Kendal Franks that the pressure of the hernial pad is more likely to cause absorption of the cicatricial tissue that constitutes a barrier to the return of the hernia, and that it may be an instrument for harm rather than for good. I have, moreover, systematically added to my operations for relief of *strangulated* hernia the procedure above described, by which I endeavor to secure a radical cure—if possible—in every case. It adds an almost inappreciable element of danger, while it very materially enhances the benefit of the operation.

I do not wish to detain you longer and will content myself now with presenting a brief resumé of my personal work in this direction. For the sake of convenience as well as of accuracy I have divided my cases into two classes, one class comprising cases of active and serious strangulation, in which to the operation for immediate relief I have superadded that for radical cure; the other class comprising cases upon which I have deliberately operated at a time when no immediate or urgent symptoms required it. Of cases of the first class I have had twenty, the oldest seventy-eight and the youngest six years. Eleven of these have been males, and five females; Four of these have died, but from causes in no wise connected with the operation, unless the possible element of shock should be taken into consideration. The four were cases of desperate nature in old or decrepit individuals, from whom scarcely anything else could have been expected. I believe that the first of this series of cases in which I had operated had a partial return of his hernia, but I understand that he is now going about as usual, not wearing any truss and not suffering from any hernial protrusion that one can detect. Another case also had a partial relapse.

Of cases of the second class I report *fifty-two, not only without a death, but without the occurrence of any sign or symptom which has at any time given occasion for alarm.* Most of these cases have pursued a course as even and undisturbed as follows