

more brilliant, more rapid, and withal more dangerous competitor—Lithotomy.

It is to be regretted that statistics do not represent the true state of the question, so far as a general comparison between the two operations is concerned; and for these reasons. For Lithotrity to be successful it is supposed to be necessary that the stone be of moderate size, single, and not too hard; and that the urinary organs be in a healthy state. I say *supposed* to be necessary, for in some of the cases I met with, the stone was large; in some cases multiple; and in more than one case the organs were in a far from healthy condition. If, however, we admit statistics as they are furnished to us by those who practise both operations, Lithotrity is one of the most satisfactory. Civiale, whom I have seen operate many times, and whose dexterity and delicacy in handling his instrument I have much admired, says that out of 591 operations there were only 14 deaths, or 1 in 42.2. This was in his own practice; while Lithotomy, until recently, gave 1 in 7.9. The statistics furnished by great Britain are meagre. Twenty-five years ago, cases were frequently sent thence to the great Lithotritist at Paris; but Brodie, Ferguson, Keith and Thompson soon came to retain in Great Britain cases that would otherwise have been sent to France. Brodie lost 9 out of 115, and of these only 5 were due to the operation. Ferguson lost 12 out of 109 cases, and Keith 7 out of 129. Sir Henry Thompson's earlier returns were 84 cases and 4 fatal. His later returns 184 cases, and recoveries 93 per cent. And, omitting five deaths from other causes, the mortality amounted to only four per cent. "I may now say, says Sir H. Thompson, "that the deaths which occurred from all causes during or after the conclusion of treatment, among 204 cases of patients, averaging 61 years of age, were 13 in number, constituting a rate of recovery of 93½ per cent. Mr. Chrich-ton in 122 cases had only 8 deaths, or less than one in fifteen. "Considering," says a writer, "the relative mortality of the two operations, so highly in favour of Lithotrity, the small proportion of cases submitted to this operation would scarcely seem judicious." But a more recent writer, Sir H. Thompson himself, says: "although the proportion crushed now, I believe, by most surgeons, is mostly larger than that submitted to the knife, I have ventured to regard Lithotrity as the rule, applying it to five out of every six adult cases; and to employ Lithotomy only as the exception." Gentlemen, I must be pardoned if I append my puny figures to those just read to you. I require three to make a score of cases of Lithotomy and Lithotrity combined—eight of the former and nine

of the latter. But as in one of the cases of Lithotomy I had previously lithotrotized the patient; and as in one of the cases of Lithotrity, the patient had been previously lithohomized by me; although this does not diminish the number of cases it does the number of patients, who are thereby reduced by two.* Of the eight cases of Lithotomy I have little to say. They presented no special features of interest—five of them were in children. The lateral operation was performed in all but one case—when Allarton's method was followed. They all terminated favourably. One, however, a boy, operated upon four years ago, from whom I removed a stone weighing three drachms 49 grains, still suffers, and probably ever will suffer, from incontinence of urine. The number of calculi in each case was one, with one exception. From one patient lithotomized, I removed twenty-five calculi; yet within six months I lithotritized him, new calculi having formed in the interval. Of the nine cases of Lithotrity, six recovered perfectly, and without a return of the disease; one was operated upon the second and last time more than a year ago; and of the two incomplete cases, one, undertaken at a most critical period, was abandoned; and one was partially crushed by the Lithotrite, but a sacculated bladder rendered recourse to Lithotomy necessary. In no case where the Lithotrite was used was the bladder injured, and (the same has been observed by others) even when the irritability was considerable before the operation, that irritability was lessened before any *debris* had passed away. Of the average number of sittings in each case I have no record. The greatest number, however, in any case, so far as my memory serves, was sixteen, and the fewest number was three times.

Surgical writers are accustomed to lay down certain rules for the guidance of Lithotritists which appear to me to be somewhat faulty, and to some of which I shall allude:—

1st. As to the use of chloroform. Chloroform should generally be administered. It was given in all but one case, the nervous, restless condition of the patient, and the frequently irritable condition of the bladder, rendering it necessary.

2nd. It is recommended to empty the bladder and then to inject with tepid water until that viscu contain five to six ounces of fluid. That advice I regard as most pernicious, as the injection of warm water is really more painful, and may be more dangerous, by inducing spasm of the bladder, than the intro-

* Nov. 13. An operation (Lithotomy) on a congenital case of stone in a child five years of age, performed to-day, increases that number.