

satisfied as to our correct diagnosis, and feeling much interest in the case, I desired to be kept informed of its progress by the doctor, and with his consent, also asked his wife to write me occasionally how he was doing.

From time to time the report was, no improvement, and no secretion of bile in the stools, was gradually getting weaker. From the reports as well as partly in consequence of a description given me by my nephew, Dr. R. H. Orten, of autopsies made upon two similarly obscure cases which had resulted in death, and proved in both cases to have been impacted gall stones, I became strongly convinced that poor Mr. H. also suffered from impacted biliary calculi, and wrote Dr. S. my opinion, and that whether or no, I thought an exploratory incision should be made, which, in case of it proving malignant, could do no harm under proper antiseptic conditions, and if calculi were found after removing those found in gall bladder, or what could be got at in ducts, an anastomosis could be made between gall bladder and duodenum with Murphy's button, and a new channel formed for the secretion of bile, if the common duct was occluded. This was finally consented to both by Dr. S., the patient and the family, and after what proved to have been too long delay, poor Mr. H. was sent up to Winnipeg to be operated upon by me, if upon again seeing and examining him, I deemed it advisable.

Upon his arrival I was greatly shocked at the sad change in his appearance; his emaciated condition, pained expression of countenance, increased jaundice which had become of a deep olive green hue, gave him altogether a very ghastly appearance. Upon careful examination I became confirmed in my opinion that it was impacted biliary calculi.

I invited Drs. Howden, Macdonnell and R. H. Orten to examine him with me, and we all agreed, as did subsequently Dr. Grain, who afterwards saw him alone. I at once removed him to a private ward in the new and elegantly equipped St. Boniface Hospital, and notwithstanding that at his advanced age, being in his seventy-first year, and in his feeble and complicated condition, for he had suffered for years with chronic bronchitis and catarrh, and that operative interference was comparatively hopeless, I decided to give him that only chance of life, and was the more encouraged

so to do by the longevity of his family history, his really excellent pulse under all the circumstances, his apparently perfectly sound heart and his almost normal temperature. Latterly he had almost lived upon porridge and milk, and his tongue was wonderfully clean.

Operation April 4th, 1894, aided at different points by above-named medical gentlemen and in presence of other well-known Winnipeg medical men. Chloroform administered after hypodermic of 7½ gr. strychn. nit. and two tablespoonsful of brandy by the mouth. An incision made three and one-half inches from point of ninth rib down an inch to right of, and parallel with, the border of rectus muscle into the abdominal cavity, which at once brought into view the lower border of liver and gall-bladder, both much congested; a large calculus was readily distinguished in gall-bladder. The duodenum was then brought up from behind the lesser omentum and the appropriate suture — — — — — introduced, but no incision, — — — — — fortunately, made for insertion of male portion of button, as upon introducing a similar suture in gall-bladder pus exuded freely, whereupon, after packing well with gauze to prevent extravasation of pus into general abdominal cavity, I made an incision into gall-bladder, and after evacuation of pus, extracted, by means of a bullet forceps, a calculus the size of a very large nutmeg after first breaking off a portion, and also a number of smaller calculi. This large calculus appeared to be firmly impacted into the mouth of the cystic duct, and beyond it the duct seemed to be almost impervious for a distance, the gall-bladder was greatly thickened and its walls utterly unfitted for the application of the button, so I decided to stitch the opening to the peritoneum and skin, to thus endeavor to secure an external fistula for the bile to escape, and as the calculi I could easily feel in the cystic duct, and, as I thought, also in common duct, could not be safely extracted, I thought we might eventually dissolve and extract through this external fistula. The peritoneum was brought together, as well as the skin, by common interrupted sutures, and the gall-bladder filled with gauze to act as a drainage.

The patient recovered well from the chloroform, and, though terribly troubled with cough, and the expectoration of what appeared to be purulent