

influences me perhaps more than any other, is that of bringing to the attention of the medical profession as vividly as possible my experience in the disastrous effects, direct or indirect, of gall-stones when left to themselves, compared with the brilliant results of early surgical treatment.

The material upon which this paper is based consists of my private cases and of the cases treated at the Massachusetts General Hospital. I have not been able to go through the records of the hospital with thoroughness, or to collect from my own records the full number of the cases which have been under my direct observation. The number, however, has been very considerable. At the Massachusetts General Hospital the number of operations upon the biliary passages has been three hundred, more or less. Besides these operative cases there have been a large number of patients treated medically. Some of these patients have been advised against operation, while others have declined surgical intervention even when operation has been strongly recommended. In my private cases there have been many in which no operation has been thought justifiable. Many of these patients, I saw early in my practice—long before gall-bladder surgery had reached its present perfection; in similar cases I now have some of my best results. There have been many cases in which gall-stones have been discovered in the course of other abdominal operations. In the latter cases I have had an unusual opportunity, after the exact demonstration of the physical attributes of biliary passages containing stones, to ascertain accurately the symptoms possibly dependent upon these abnormal conditions. The material upon which my remarks are based seems to me, therefore, abundant.

Up to recent years the pathology of gall-stone disease was dependent wholly upon the autopsy table. In cases of gall-stone disease fatal of itself the pathological changes were necessarily of the most chronic and extensive character. It was possible to learn very little of the anatomical conditions present early in the disease. Even to-day the demonstration at autopsy of changes dependent upon gall-stones is necessarily imperfect. Abnormalities which during an operation on the living would lead the surgeon perhaps directly to the seat of the lesions—variations in color, consistency, friability, and the like—are not noticeable in the dead, these variations from the normal having either entirely disappeared after death, or having been lost in rapid post-mortem changes. Unfortunately, however, the pathological conditions of gall-stones to-day in a great many cases—happily growing