

at that Dr. Deaver and other eminent surgeons fail to appreciate the value of blood diagnosis from the present state of our knowledge.

It is mainly perhaps in appendicitis, typhoidal perforations, and obscure pus formations that the hæmatologist claims to give aid to the surgeon. Let us see to what extent this is true. In appendicitis, the attacks are accompanied at all stages by varying white blood counts; abscesses may form without an increase of cells, or, *per contra*, one may obtain from a simple catarrhal inflammation, that later subsides, a marked leucocytosis (say 18,000), and lead the credulous surgeon astray. Dr. Deaver records one case of interest which will, I think, help to give us a clue to our means of benefiting such patients. An individual was admitted to his care with signs of appendicitis and the leucocyte count showed 20,000 cells. Operation was delayed for the nonce and subsequent examinations revealed a gradually decreasing leucocytosis down to the normal. Naturally it was concluded that pus was absent, but from other suspicious signs the abdomen was opened and a gangrenous appendix with local suppuration found. So far as I have found personally, or otherwise learned, a leucocytosis of over 20,000 has not been found in non-suppurative inflammations either of the appendix or of the pelvic organs, and for this reason Dr. Deaver's case might reasonably have been operated upon as early as this marked increase had been found. It should, I think, have strengthened his faith in the diagnostic value of great leucocytosis. The important point, however, is this, *viz.*, that the reverse rule does not hold good, and *one may readily get an absence of leucocytosis with extensive suppuration*. One should, therefore, not trust to a moderate leucocytosis as a basis for excluding the presence of pus if one would be rightly guided. In a case recently seen with Dr. Bell, the appendix was gangrenous and abscesses had formed in the liver, but the white cells numbered on an average only 15,000.

The same holds true for typhoid perforation, as was shown by Dr. C. K. Russel's interesting observations made at the Montreal General and Royal Victoria hospitals. In several instances the abdomen had been opened for symptoms of perforation with a leucocytosis of about 15,000 to 17,000, and nothing found. In other cases the white cells were less than normal, when perforation was in progress and had developed; but in no case where the leucocytes numbered more than 20,000, had the abdomen been opened without a perforation being present. Dr. Russell has added several others to his series, attesting the value of this feature, and it may, I think, reasonably be said that, to a surgeon, the value of a blood examination in this respect lies in the positive findings