## PIN WORMS IN THE APPENDIX

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HE extent to which this parasite may be a causative agent in the production of appendicitis is yet to be determined, but when one finds these worms present as the apparent sole exciting factor of that syndrome of symptoms which we consider indicative of chronic appendicitis, and note the return to the normal condition after the removal of this breeding ground, we may be justified in giving the oxyuris vermicularis a place as one of the causative factors of appendicitis. As to acute suppurative inflamation, clinical evidence is yet insufficient for us to assume the connection of cause and effect, but it is highly probable that in those cases of acute perforation where worms have been found in the peri toneal cavity, they were the factor, if not the exciting cause.

Metchnikoff found the ova of the ascoris lumbricoides in fecal matter from a young girl aged ninteen who already had six attacks of appendicitis, and who recovered after passing two ascarides. Lemoine reported two similar cases one a child of twelve, the other a man of twenty-three. It was impossible in these cases to state the exact condition of the appendix, since these four cases recovered without an operation, but the clinical symptoms were typical of appendicitis.

The writer has found pin worms present as the only observed factor of irritation in seven cases that have come to the operating table, six of these being children. The seventh was a sturdy farm laborer aged twenty-four. He had complained of intermittent pains in the stomach and bowels for two years, a slight tenderness was detected over McBurney's point, the appendix was engorged the mucosa very much thickened. A flourishing colony of pin worms was found near the distal extremity of the appendix. The microscope showed innumerable ova upon the surface of the mucus membrane. No other abnormality was discov-



ered within the abdomen. These seven cases presented the usual somewhat vague symptoms of chronic appendicitis, indigestion, flattulence, pain radiating towards towards the epigastrium and slight tenderness in the right fossa, with disorder of motor and secretory functions, no doubt caused by the irritation of the sympathetic ganglia within the bowel wall by the parasites snugly domiciled in the most dependent part of the appendix. The frequency of the appendix as a breeding place for parasites may explain the great diffi-