

such as high-grade ascites and compression of the gall bladder by tumours do not as a rule give rise to gall stone formation, and therefore mechanical pressure of the growing uterus as a cause of stagnation of bile and the formation of gall stones cannot be accepted. Aschoff and Backmeister's view appears to be the most plausible—namely, that during pregnancy the increased fat metabolism leads to an increased formation and output of cholesterin; and, further, it is probable that during pregnancy the resistance of the gall bladder to infections is diminished. The author has for many years been accustomed to forbid conceptions in women suffering from cholelithiasis until they have been free from symptoms for at least two years. The question of interruption of frequency can only arise in obstinate repeated attacks, when accompanying persistent vomiting prevents not only treatment but feeding. The different forms of acute and chronic gastric and intestinal catarrh play a specially important part in the causation of gall stone disease and of the chronic relapsing course often run by the cases; apart from obvious cases of such catarrh, systematic examination, as by Schmidt's method, shows that objective signs of catarrh are present in more than half the cases, and systematic tests should never be omitted in order that prophylactic treatment directed towards the catarrh may be always undertaken if required. In treatment of the developed disease, the principle to be observed is to aim, not at the removal of the stones, but at bringing about retrogression of the inflammatory processes and latency of the disease. In the treatment of an acute attack, the author gives morphine as early as possible in doses of 0.02 to 0.03 gram combined with 0.001 gram of atropine. The atropine helps to allay the pain and to remove the side-effects of the morphine. For milder attacks suppositories of 0.02 gram pantopon and 0.02 of ext. belladonna are the most convenient remedy. With the removal of the acute symptoms treatment of the underlying inflammatory processes becomes imperative, and neglect of this is, in the author's opinion, the most usual cause of chronicity of the disease. The author has no faith in the action of the so-called cholagogues, and points out that recent knowledge tends to support the view that increased secretion of bile may cause increased stagnation of bile in the gall bladder. Winogradow's investigations show that Carlsbad waters lead to a diminished secretion of bile, and the necessity for complete rest so long as manifest cholelithiasis is present is now a recognized principle at Carlsbad, where its adoption has been followed by diminution in the number of attacks of colic occurring there. A second principle of treatment at Carlsbad is the administration of large amounts of warm fluid, which, whether or not it causes increased secretion, must lead to dilution of bile and practically almost to a washing through of the bile passages.