Post-operative pulmonary embolism has recently attracted a considerable amount of attention, but little is known regarding its causation. In severe injuries of the lower extremities, or in diseases of the blood and blood-vessels, the transmission of a thrombus formed in the venous system towards its terminus, the pulmonary artery, is easily understood, and at the autopsy evidence of this is usually obtained. It is different, however, when it occurs in vigorous patients after a simple operation for hernia or for recurrent appendicitis. No clotting beyond what is necessary for the process of repair can be found at the seat of operation. In such cases the theory has been advanced that the clot extends to the pulmonary artery from its primary situation in the right heart. If so, it is not yet understood why such a thrombosis should occur in a robust person after a few days in bed. At the German Surgical Congress of 1908, various etiological factors were suggested—the anaesthetic, the concentration of the blood from loss of water during the operation, infection from the wound or the intestinal canal, dilatation of the saphenous vein favouring thrombosis there, and others. But Gibson (Med. Rec., 9th January 1909), in a survey of the reported cases, finds only two factors with an etiological bearing—the age of the patient and the site of the operation: the great majority of the patients were between forty and sixty; the location of the operation was always below the belt.

Regarding immobility and confinement to bed after operation there was a singularly unanimous expression of opinion at the German Congress that this was not a causative factor, and that patients should be kept in bed for a fortnight at least after a laparotomy. The condition most frequently occurs in the first week (60 per cent.) and second week (29 per cent.) after operation, but it may occur after the patient has been going about for some weeks. Most of the deaths have taken place within forty-eight hours after the operation, the symptoms lasting from ten minutes to half an hour.

Several suggestions have been made to guard against the accident—massage of extremities, free movements of left leg, early purgation, cardiac stimulation; but the value of such measures cannot yet be estimated. Trendelenburg has recently attempted the removal of the clot from the pulmonary artery (Zentr. f. Chir., 1908, Nos. 4 and 35).

Subphrenic Abscess following Appendicitis.

An exhaustive review of the published cases of subphrenic abscess of appendicular origin is given by Lance (Gaz. des Hôpitaux, 16th and
23rd January 1909). From the statistics of almost a thousand cases, he finds that over 20 per cent. are due to appendicitis, over 30 per cent. to gastric and duodenal ulcer, 13 per cent. to lesions of the liver and gall-bladder, and the remainder to conditions affecting the pancreas, spleen, large intestine, pleura, &c. It occurs in 0·5 per cent. of all cases of appendicitis, in 1·33 per cent. of those requiring operation, and in 3 per cent. of suppurating cases. The abscess generally appears as a post-operative complication (66 per cent.).

Rarely the infection is carried to the liver by the portal vein, and the subsequent bursting of a superficial liver abscess gives rise to the condition. As a rule, however, the spread is a continuous one, either by the cellular tissue and lymphatics or by the peritoneum. In the former the appendix is most commonly posterior and directed upwards, and the infection extends retroperitoneally behind the kidney. The right side of the diaphragm is affected throughout its whole thickness, and is frequently perforated. In 60 per cent. of such cases the abscess is associated with empyema. In the intra-peritoneal spread, the infection may travel along the outer side of the ascending colon (Robinson's parieto-colic sinus) or its inner side. When the appendix is low down and a pelvic abscess is formed, it may follow the inferior surface of the mesentery or the left border of the descending colon, giving rise to a left subphrenic abscess. Finally, a right or left abscess may remain in this situation after a generalised peritonitis. Lance's statistics show in five cases a spread by the portal vein, in forty-one by the lymphatics and cellular tissue, in fifty-two by the peritoneal cavity.

The onset of the disease may occur during an attack of appendicitis, or as long as six months after. It is usually sudden and is characterised by stabbing and shooting pains, fever, vomiting and rigors. Occasionally the abdominal symptoms are absent, and the first signs are of empyema. The abscess may evacuate through the original incision, into the pleura, lung, pericardium, peritoneum or transverse colon. It shows no tendency to open on the surface.

**Extra-Vesical Suprapubic Prostatectomy.**

Van Stockum has recently described his operation of extra-vesical suprapubic prostatectomy (Zentr. f. Chir., 9th January 1909). Through a vertical mesial incision a finger is passed behind the symphysis pubis to define the anterior surface of the prostate and the beginning of the urethra. A sound previously passed is a useful guide. Then the anterior surface of the gland is bared over a limited extent, and a small vertical incision made in the capsule at its upper end. With two fingers inserted through the incision the prostate is enucleated as in Freyer's operation, and the cavity is packed with gauze. In his first two cases Van Stockum has purposely opened the bladder and drained it through
the wound, but he hopes to dispense with this in future, and merely leave a catheter in situ. He considers that the neck of the bladder suffers less damage by the extra-vesical method, and drainage by the catheter will not be rendered inefficacious by the formation of clots.

OBSTETRICS AND GYNECOLOGY.

By A. H. F. BARBOUR, M.D., LL.D.,
Lecturer on Gynecology,

and

B. P. WATSON, M.D., F.R.C.S.,
Gynecological Tutor, Edinburgh University.

THE TIME TO OPERATE IN TUBAL PREGNANCY.

During the past year a prolonged discussion has been going on in the American journals as to which is the best time for operative interference in cases of tubal pregnancy, and more particularly in those in which rupture has taken place with intra-peritoneal haemorrhage. In May of last year the American Gynecological Society discussed the subject of "Immediate versus Deferred Operation for Intra-peritoneal Haemorrhage, due to Tubal Pregnancy," and papers were read by Frederick, Montgomery, Simpson, Manton, Lapthorn Smith, Boldt, Baer, King, Janvrin, and others, while Martin of Greifswald and Pfannenstiel of Kiel took part in the discussion (American Journal of Obstetrics, July 1908). There were certain points on which there was practical unanimity among the speakers. All agreed that in many cases a diagnosis of tubal pregnancy could be made before rupture. Given a history of amenorrhoea, of irregular crampy pains in the lower abdomen, with or without slight, intermittent vaginal hemorrhage, and the presence of a definite swelling to one side of a slightly enlarged uterus, the diagnosis of tubal pregnancy is practically certain. In such a case the treatment ought to be laparotomy and removal of the pregnant tube before symptoms of rupture appear. The operation can be done at the time of choice and under the best conditions as regards preparation of the patient and asepsis.

In the second class of case where there has been a partial rupture of the tube or an attempt at tubal abortion, as evidenced by severe spasms of abdominal pain accompanied by faintness and some pallor indicating internal hemorrhage, all were agreed that, while operation is the only rational treatment, there is no immediate hurry. The patient, provided she is under constant observation, may be allowed to recover from the immediate shock while suitable preparations are made