few small, soft glands were felt in the lowest part of the meso-sigmoid. The liver was free and no other glands were felt. A colostomy was performed through the exploratory incision. A piece of growth was removed from the rectum for biopsy. (?) Sarcoma. 12.8.31.—Perineal excision of the rectum was performed. The growth stripped easily from the prostate but there was marked œdema of the line of cleavage in front and of the post-rectal fat. A few small, soft glands were removed with the rectum. The patient made an uninterrupted recovery, the tissues healing well, allowing the patient to be out of bed on the twenty-first day.

Description of specimen.—The specimen measured 9 in. in length, there being a flat, only slightly ulcerated growth, 2 in. in its long axis, completely encircling the lower third of the rectum. The growth caused a great deal of thickening of the rectal wall and peri-rectal tissues. The lower edge extended down to the ano-rectal line and there were 2½ in. of normal bowel above. The surrounding mucous membrane was very rough and nodular.

Microscopic structure.—The tumour was composed of closely packed polygonal cells forming a solid mass of growth which was infiltrating the muscle wall of the rectum and had spread by direct continuity into the peri-rectal tissues. The histology of the tumour was that of an adeno-carcinoma, Grade 4. The regional lymph nodes contained metastases. From the point of view of prognosis this was a "C" case.

Deep X-ray treatment.—Ten doses of hard X-rays to the perineum and lower abdomen.

Present condition.—The patient is very well and is about to restart his work as a taxi driver.

Commentary.—There is very little reference to this diffuse submucous carcinoma of the rectum in any of the standard works on pathology or rectal surgery. There is a description and photograph in Gant's "Diseases of the Rectum" of a somewhat similar case. The macroscopic description is almost identical with that of the specimen I have shown, but the microscopic appearances are said to be those of a slowly-growing carcinoma, the malignant cells being strangled by dense fibrous tissue. On the other hand, the histology of this specimen proves to be, without doubt, a very malignant tumour, the cells of which are very dedifferentiated. The sections are identical with several of Broder's Grade 4 specimens of which I have had the opportunity of studying. The clinical differential diagnosis of this type of carcinoma from sarcoma of the rectum must be extremely difficult, and biopsy in this case only settled the diagnosis, after very careful examination of the section. There are some regions in the sections, especially in the submucous coat and in the glandular metastases, in which there is a suggestion of a glandular arrangement. This type of carcinoma of the rectum might well be described as a "leather-bottle" rectum, since it is very similar to the diffuse submucous carcinoma of the stomach.

Endothelioma of the Rectum.—C. NAUNTON MORGAN, F.R.C.S.

Mrs. E. E., aged 72. Admitted into the Metropolitan Hospital 17.9.31.

History.—Eighteen months: Pain and prolapse on defæcation. One month ago: Severe rectal hæmorrhage with passage of large quantities of foul-smelling slime; no diarrhœa; bowels open with medicine. No loss of weight.

Condition on admission.—The patient was an extremely frail old lady and had severe urinary infection with marked cystitis.

Examination per rectum.—There was a pedunculated polyp an inch and a half in diameter, arising from the posterior rectal wall one inch and a half from the anus. It was smooth and hard, the surface being slightly ulcerated at one place. The base of the pedicle was soft and non-indurated. It could be brought to the anal orifice with ease.

Operation, 18.9.31.—Examination was carried out under gas and oxygen anæsthesia. The base of the polyp was clamped and ligatured and the tumour excised. There were several hard submucous tumours felt in the posterior rectal

wall, higher up, the mucous membrane was everywhere freely mobile over them. Further investigation of these tumours was thought unjustifiable owing to the patient's general condition. 8 mc. of radon in four seeds were inserted into the base of the polyp and also into the submucous tumours.

Present condition.—There is nothing abnormal felt in the rectum. Sigmoidoscopy also revealed nothing to 12 cm. The patient has been free from bowel symptoms since the operation.

Description of specimen.—The specimen consisted of a round tumour one inch and a half in diameter, its cut surface being smooth and greyish white in colour. Its surface was slightly ulcerated.

Report on microscopical examination.—The tumour is composed of closely packed large polygonal cells which are infiltrating the muscle coat of the rectum. Many of the columns of cells are arranged around primitive capillaries, containing red blood-cells, and the general arrangement and histology of the tumour is that of an endothelioma arising from vascular endothelium.

Commentary.—The only references to endotheliomata which I could find in the standard works were in Ewing's "Neoplastic Diseases," and Yeoman's "Diseases of the Rectum." Ewing says, "The existence of true endotheliomata of the gastro-intestinal tract remains unproved, if not improbable." The existence of a case of endothelioma of the cervix uteri was denied, and Hansemann's theory that the so-called scirrhus carcinoma of the stomach was an endothelioma developed from the submucous lymph spaces was thought extremely unlikely. Brief reference was made to endotheliomata in Yeoman's work. He says that they were rare tumours similar to gliomata which had been reported in the sacro-coccygeal region. There is no mention, however, of endotheliomata arising *in* the rectum.

Lockhart Mummery and Gabriel reported a case of sarcoma of the rectum which, on further investigation, was described by Professor Shattock as a benign endothelioma.[1] The specimen is at present in the Museum of the Royal College of Surgeons. The rectum was removed by perineal excision, and presented a hard, nodular, submucous growth, involving the anterior wall of the rectum two inches from the anus. The tumour was a white, fasciculated submucous growth with mucous membrane apparently intact over it, and there was no sign of invasion of the muscular wall.

Specimen of Recurrent Procidentia with Diverticulosis. ERNEST MILES, F.R.C.S.

The specimen was removed from a woman, aged 67, who had suffered from prolapse of the whole rectum for five or six years.

There was no sign of inflammation in the diverticula, and the specimen was of interest since inflammation was thought by some authors to be the cause of diverticulosis.

Specimen of Secondary Sarcoma of the Pelvic Colon removed by Abdomino-perineal Excision.—ERNEST MILES, F.R.C.S.

The patient had suffered from a round-celled sarcoma of the uterus which was adherent to the colon. About six months after hysterectomy she was seen on account of difficulty of defæcation. Death occurred from deposits in the lung six months after the removal of the growth in the colon.

Specimen of Endothelioma of Rectum.—LIONEL E. C. NORBURY, F.R.C.S.

The patient, a woman aged 30, gave a history of spurious diarrhœa, with passage of mucus and occasional blood for several months.

Sigmoidoscopy.—Growth seen at 15 cm.; portion removed for microscopical examination.

Report (Dr. Cuthbert Dukes).—"Histological appearances are those of an endothelioma, arising from vascular capillaries."

[1] *Proceedings*, 1919, xiii, Sect. Surg. (Sub-Sect. Proct.), 14; 1921, xiv, Sect. Surg. (Sub-Sect. Proct), 80.