急性胃壊死の二例

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TWO CASES OF ACUTE NECROSIS OF THE STOMACH

by

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We here present a report on two cases we have come across of an unheard-of condition produced in the stomach, resembling acute necrosis or acute necrotic phlegmon ; we add by way of comment a few considerations we have given to its cause, symptoms and surgical pictures as no information seems available in any literature, authentic or otherwise, about such a condition occurring in the stomach.

CASES

Case 1 : a 68-year-old male, with no occupation.

Chief Complaints : abdominal pain and vomiting. Anamnesis : Nothing noteworthy except that medication was resorted to from time to time for a mild epigastric pain recurring in the last 10 years ; the onset of the necrotic condition was preceded 7 days by a mild epigastric pain, not attended by any vomiting, pyrexia, or diarrhoea and not interfering with light carpentry the patient was engaged in at the time ; anorexia was complained on the day of the onset and at or about 8 P. M. namely some 2 hours after a slight evening meal was taken, the epigastric pain became acute and the patient twice vomited the remaining contents of the stomach, though not attended by hematemesis. A physician was sent for immediately, and he gave the patient an analgetic by injection.

The symptoms manifested at the time of this examination were tenderness and spontaneous pain in the epigastric region, unattended by any muscular rigidity of the abdominal wall ; the body temperature standing at 36.8°C ; the analgetic administered left the patient much relieved and put him to sleep ; at 9 A. M. on the following day, namely 13 hours after the onset, the patient was found semiconscious and hardly capable of conversing with members of his family, with his abdomen extremely expanded. An hour or so later he was ambulanced into our hospital.

Status praesens : Physique and nutrition medium ; consciousness confused ; pulse enfeebled---about 120 per minute ; blood pressure 56mm Hg at its peak ; body temperature 36.7°C ; the skin and visible mucosas slightly cyanozed ; the abdominal region extremely expanded as a whole and stiffened like a plank or a stone block ; no intestinal souffle heard on auscultation and no lung-heart boundary confirmable on percussion ; the right hypogastric region marked with a subdermal crepitation and the epigastric-dorsal

region, with diffuse dark-red subdermal maculae with extravasated blood in them ; the white blood cell count 13500, the red cell count 3,700,000 and the hemoglobin index (Sahli) 72%.

Clinical diagnosis : Acute peritonitis diffusa and toxicosis.

Operation findings : Laparotomy along the median line across the epigastric region was followed in no time by the ejection from the abdominal cavity of some gas and ascites stinking and dark greenish-red ; the abdominal cavity cut open had residual food scattered in it ; the stomach was black and necrotic extensively across its lesser curvature and the necrotic area was perforated at two points in its middle part ; one hole measuring 2.5cm across and the other 1 cm across (Fig. 1), through which the contents of the stomach were flowing out ; the vermiform appendix and other organs remained practically unaffected ; excision of the entire necrotic area and adjacent tissues resulted at once in death.

The Outline Picture of the Affected Stomach : The stomach as an extirpated organ had a fairly welldefined dark-red necrotic area extending widely across its lesser curvature, and the surrounding part of the stomach wall was somewhat edemous, though not markedly tumorous or reationally indurated ; the stomach, including the necrotic area, was diffusely hemorrhagic in its mucosa (Figs. 2 and 3).

The Histological Picture of the Same : The blackened area across the lesser curvature was necrosed and, together with the surrounding areas, was congested and edematous, with some signs of extravasation and round cell infiltration, but not of any inflammatory change, retained in it ; the necrosed area contained, besides, a macroscopically indetectable amount of cancerous tissue in its middle portion (Figs. 4 and 5).

Bacteriological Tests : The contents of the stomach were found positive for Gram-positive diplococci, bacilli, fungi, and Gram-negative bacilli, but not for any anaerobes.

Case 2 : a 40-year-old male.

Chief Complaints : Abdominal pain and vomiting.

Anamnesis : Dull epigastric pain and vomiting, each persisting for the past several years and treated occasionally with Creosote without a physician's examination ; supper taken at 7 P. M. on the day of the onset of the disease to be described later was followed in an hour or so by nausea and mild epigastric pain, for which 20 tablets of Creosote were taken ; the pain aggravated on the same night while the patient was in a motion picture theater with members of his family, and he left the theater alone and on his way home saw a physician, who diagnosed his complaint as mild food poisoning and administered by injection Lodinon, Vitamin B_1, a sulpha drug and an analgetic.

The subjective symptoms remained undiminished till the next morning, the stomach contents vomited time and again in the meantime containing in part some substance like refuse coffee. The physician sent for at about 1 P. M. found on examination that the body temperature was about normal, that the matter vomited uncontrollably and with increasing frequency resembled refuse coffee in color and Creosote in odor, and that the abdominal region was slightly hypertonic and tender in its wall, and that the general and the abdominal disorder were too mild to be indicative of the possible development of perforating stomach ulcer. The drugs given by injection were, accordingy, an analgetic,

Lodinon, Vitamins and sulpha. The disease continued aggravating until the physician was called in again at 5 P. M. and found the patient vomiting continually in a state of muddle consciousness and manifesting marked symptoms of peritonitis. It was in this condition that the patient was brought to our hospital at 9 P. M. the same day, namely 29 hours after the onset of the disease.

Status praesens : Both physique and nutrition medium ; the semiconscious patient, writhing with stomachache, admitted of no direct examination in the form of questions and answers, nor of any palpation for pulsefeeling, made the blood pressure indeterminable ; the white blood count 11,500, the body temperature 36°C, the abdominal region expanded as a whole, the epigastric area tender, the abdominal wall hypertonic, and the epigasric-dorsal region marked with dark-purplecolored specks of extravasated blood scattered all over it.

Clinical diagnosis : Acute necrosis of the stomach.

Operation findings : Median laparotomy across the epigastric region disclosed the intraperitonial presence of ascites, pale red in color, a trifle turbid, and not pus-like in nature ; the stomach was remarkably expanded to the size of a child's head and had on the anterior wall of its fundic area, on the side of the greater curvature, a fairly well-defined dark red necrotic lesion larger than a hen's egg, and the stomach wall, much reduced in thickness in this necrotic area, was on the verge of rupture and perforation there (Fig. 6) ; the contents of the stomach withdrawn on partial gastrectomy proved to consist of some 3000 cc. of a matter resembling refuse coffee and not appreciably stinking ; subtotal gastrectomy was scarcely completed before the patient was overtaken by death.

The Outline Picture of the Affected Stomach : The stomach removed was necrotic and dark red colored in a fairly well defined part, larger than a hen's egg, of the anterior wall, on the side of the greater curvature, of its fundic area ; the wall was marked, besides, with specks of extravasated blood scattered over it ; the mucosa was particularly congested or bleeding here and there all over its surface, though the wall itself was not thickened as in inflammation, or indurated, carcinomatous or ulcerated in any part of it (Figs. 7 and 8).

The Histological Picture of the Same : In the area of the stomach which was considered as necrotic on macroscopic inspection, the tissues were all found necrotic, hemorrhagic and thrombotic on histological scrutiny ; among the other changes found occuring in the stomach wall the most noteworthy was diffuse browncolored pigmentation ; also noticed were extensive edema and mild round-cell infiltration, but no inflammatory change anywhere (Figs. 9 and 10).

Bacteriological Tests : The contents of the stomach, standing at pH 5. 6, were positive exclusively for Gram-negative bacilli.

Discussion

The disease described above in the two cases was obviously peritonitis diffusa or toxicosis, developed from acute necrosis of the stomach ; the clinical course it took and its pathological, histological, and bacteriological pictures, in vivo and post mortem, left no room for doubt about this diagnosis. The disease was characterized in both cases by these

facts :

1. Dull pain in the epigastric region, complained of at frequent intervals in the past several years, was medicated each time, indicating presumably that the primary condition was chronic gastritis.

2. An evening meal was taken on the day of the onset of the disease and the subsequent nausea and epigastric pain, which continued to worsen, were treated with an analgetic by a doctor who diagnosed the condition as mild food-poisoning and prescribed bed rest at home.

3. Matter mixed with blood was vomited beyond control more than 10 hours after the onset, and by the time the symptoms of peritonitis became manifest the patient, his consciousness muddled, was critically ill in a far advanced stage of toxicosis.

4. The stomach, when surgically examined, was found necrosed and dark-red-colored in a fairly well defined part of its wall, the rest of the wall being thickly maculated with blood shed but no macroscopical change occurring in any other organ.

5. Death ensued immediately on gastrectomy, an operation inevitably performed when the stomach was found necrotic on close examination, general and surgical, of the pre-existing and subsequent state of the organ.

6. Examination of the stomach as a living organ and as a sample disclosed that, macroscopically, the necrotic part of the wall was dark-red-colored, the sourrounding part being maculated with blood shed and rendered edematous, though not thickened as in inflammation or indurated, and that, histologically, the changes produced in the tissues were necrotic in the main and inflammatory only in part---undoubtedly symptoms of necrosis and not of phlegmon or torsion.

The cause of the foregoing lesion remains to be considered next. The testimony of the family of either of the patients and the environment in which each lived make suicide, murder and voluntary poisoning inconceivable. 20 tablets of Creosote taken an hour after supper by one of the patients (Case 2) and the brown-colored pigment found deposited on histological examination in the necrtic part of his stomach may be worth further consideration. The presence, in a part of the stomach wall, of a bit of cancerous tissue and of the traces of mild round-cell infiltration and the diverse forms of bacterio found in the contents of the stomach make it conceivable in the other case (Case 1) that acute necrotic phlegmon may have been preceded by some bacteriogenic inflammation in his stomach.

The cause or causes of the condition remain unknown : they may have been different in the two cases. A fact of diagnostic and therapeutic importance in this connection is that in either case a disease submitted to home treatment on its onset took a sudden turn for the worse, developing in more than the hours, into necrosis of the stomach wall and toxicosis incurable under any treatment.

SUMMARY

Two cases of probable acute necrosis of the stomach, the findings of our surgical examination of the affected areas, and the characteristic clinical course taken by the disease were described and discussed ; the operations performed for it and each affected stomach as a sample were shown in color photographs.

緒　言

私共は特異な病状及び経過を辿つた急性胃壊死或は急性壊疽性胃蜂窠織炎とも見做すべき：症例を経験した.

症　例

症例1：

患者：63才，男子，無職.

主訴：腹痛及び嘔吐.

現病歴及び既往症：約10年前から時々軽い上腹痛があり，医師から投薬を受けたことがあつた．発病7日前から軽い上腹痛を訴えていたが，嘔吐，発熱，下痢等はなく，軽い大工仕事に従事して居た．発病当日食慾減退あり，少量の夕食を摂つた後2時間位して，即ち午後8時頃に上腹部痛が増強し．食物残渣を2回嘔吐した．其の際嘔血はなかつた．直ちに医師の往診を求め鎮痛剤の注射を受けた．往診医の言によると，当時の所見は上腹部に圧痛並びに自発痛を認めたのみで，腹壁緊張は認められず，体温は36.8℃であり，鎮痛剤の注射によつて疼痛は軽減し，患者は睡眠した．翌朝9時，即ち発病後13時間後に家人が気付いた時には患者の意識は溷濁して居り，腹部は極度に膨満して居つたので直ちに私共の病院に搬入された.

現症：体格，栄養中等，意識溷濁し，脈搏微弱．一分時約120，最高血圧56mmHg，体温36.7℃，皮膚及び可視粘膜にはチアノーゼが認められる．腹部は全般に亘り極度に膨満し，板状乃至石様硬．腸雑音は聞えず．打診上肺肝境界不明，右下腹部には皮下に捻髪音を認め，下腹部，背部に暗赤色の皮下溢血斑点が散在するのを認める．白血球数13500，赤血球数370万，血色素ザーリー72%.

臨床診断：急性汎発性腹膜炎及び中毒症.

手術所見：上腹部正中線切開で開腹．腹腔を開くと同時に腐敗臭を有する暗赤緑色の腹水と瓦斯が飛散噴出するのを認めた．遊離腹腔内には食物残渣が散在，胃は小彎側に沿つて広範囲に黒色壊死状を呈し，略々其の中央部に直径2.5cm及び1cmの2個の破裂状穿孔があり．胃内容が之から腹腔内に流出するのを認めた.（第1図）胃壊死部を含む広範囲胃切除術を行なつたが，手術終了直後患者は死亡した.

摘出標本所見．胃壁は小彎側に沿い広範囲に亘り暗赤黒色の壊死に陥つて居るが其の壊死部の境界は比較的明瞭，周囲胃壁には多少の浮腫を認めるが著明な腫瘤乃至尖鋭性硬結を認めない．粘膜面は胃全体に亘り散在性の溢血を認める．（第2.3図）

組織学的所見：小彎側黒色部の組織は壊死を示し，その部並びに周囲に充血，浮腫，溢血の像を認め，又円形細胞の浸潤も認めるが．この炎衝性変化は著明ではない．更に壊死部の中央部粘膜下層の一部に肉眼的には認め得られなかつた癌組織の存在を認めた.（第4.5図）

細菌学的検査：胃内容物の細菌学的検査ではグラム陽性双球菌，桿菌，及び真菌，グラム陰性桿菌を証明し得たが，嫌気性菌は認めなかつた.

症例2：

患者：40才，男子.

主訴：腹痛及び嘔吐.

現病歴及び既往症：数年前から常に上腹部の鈍痛，嘔気を訴え．度々クレオソートを服用して居たが医療を受けたことはなかつた．発病当日午後7時に夕食を摂り，其の後1時間位して嘔気と共に軽い上腹痛を覚えたのでクレオソート20錠を服用して家族と共に映画を観に出かけたが観劇中に腹痛が増加したので患者のみ一人で帰宅．途中医師の診察を受け，軽度の食あたりとの診断で，ロヂノン，ビタミンB1，スルファミン剤及び鎮痛剤の注射を受けて帰宅したが，翌朝迄自覚症状は軽快せず，嘔吐が頻回に起り，コーヒー残渣様物を混ずるに至つたので，同日午後1時頃再び医師の往診を受けた．往診医の言によれば，当時発熱なく，クレオソートの臭を有するコーヒー残渣様物の頑固な嘔吐があつたが，胸部には軽度の腹壁緊張と圧痛があるのみで，全身状態は良好であつたので，鎮痛剤，ロヂノン，ビタミン剤，及びスルファミン剤の注射を行なつた．其の後病状は急速に悪化し，午後5時には意識は半ば溷濁し，腹膜炎の症状が著明となり，午後9時に私共の病院に搬入された.

現症：体格，栄養中等，患者は非常に苦悶状で腹痛を訴えるのみで，意識は半ば溷濁し，直接聞診は不能である．脈搏は触診し得ず．血圧測定不能，白血球11500，高温36℃，腹部は全面に亘り膨満し，上腹部に圧痛．腹壁筋緊張を認め．更に下腹部より背部にかけ暗紫色の溢血斑の散在するのを認めた.

臨床診断：急性胃壊死.

手術所見：上腹部正中線切開で開腹すると，薄赤色の稍溷濁した腹水の存在を認めたが膿性ではなかつた．胃は極度に膨脹して小児頭大になつて居り，胃底部大彎側前壁に超鶏卵大の境界比較的鋭明な暗黒赤色

に変性した壊死部あり，その部の胃壁はゴム風船様に非常に薄くなり破裂穿孔の直前の状態を示して居た．(第6図)胃を一部切開し内容を吸引排除した．胃内容はコーヒー残渣様物約3000ccであつたが特に著明な臭気は認めなかつた．胃の亜全摘術を行なつたが手術終了直前に患者は死亡した．

摘出標本所見：胃底部大彎側前壁に比較的境界明確な超鶏卵大の暗黒赤色の壊死部あり，其の他に散在性の溢血斑を認め，特に粘膜面に於ては全般に亘り散在性の出血と充血を認めるが，著明な胃壁の炎衝性肥厚，硬結，乃至潰瘍，腫瘤の存在は認めない．(第7.8図)

組織学的所見：壊死部に於ては組織学的にも組織の壊死を示し，出血，血栓の形式を認める他に特異な所見として褐色の色素の沈着を所々に認めた．胃壁は全般に浮腫と軽度の円形細胞の浸潤を認めるが炎衝性変化は著明なものではない．(第9.10図)

細菌学的検査：胃内容物の細菌学的検査ではグラム陰性の桿菌のみを証明した．又胃内容の酸度はpH 5.6であつた．

考　　察

本症例は2例共に其の臨床経過，手術所見，及び標本所見より胃の急性壊死による汎発性腹膜炎又は中毒症であることは確実である．

而も，其の臨床経過，臨床症状，及び手術所見に類似の点が多く，極めて特異なものである．即ち

1：両者ともに既往歴として数年来度々上腹部の鈍痛を訴え，其の度に薬剤を服用して居り，元来慢性胃炎があつたものと想像することが出来る．

2：両者ともに発病当初は夕食後に軽度の嘔気と上腹痛を訴え，之が次第に増強して医師の診察を受けているが，何れも軽い食あたりとして鎮痛剤の注射を受け自宅静養をして居ることよりすれば，発病初期は通常胃潰瘍穿孔時等にみる如き強烈な症状は全くなかつたと考える可きである．

3：然るに，発病後10数時間の間に血液を混じた頑固な嘔吐に引きつづき腹膜炎の症状と共に強い中毒症状を示し意識は混濁し，腹部には特異な皮下溢血斑を認めるに至つて居る．以上の症状が特異であるために症例第2例の時には第1例の経験より直ちに臨床的に手術前に急性胃壊死の診断を下し得た．

4：手術時には胃は広範囲に亘り，而も比較的限局性に境界明瞭な暗黒赤色の壊死に陥ちいり，第1例は既に壊死部が破裂穿孔して居り，第2例は破裂直前の状態であつた．而も共に病変は胃に限局して居り，腹膜炎の他は他の諸臓器に肉眼的の著変は全く認めなかつた．

5：何れも壊死に陥つた胃の切除術を行なわざるを得なかつたが，2例共に手術直後に死亡するに至つた．

6：2例共に胃壁の壊死部は肉眼上暗赤黒色を示したが，其の周辺には浮腫と出血斑は認めたが著明な炎衝性の肥厚，硬結，潰瘍等を認めず，組織学的にも組織の壊死を主として炎衝性変化は軽微であることより，両者ともに単なる胃蜂窠織炎や胃捻転症ではなく，急性胃壊死と言う可きものと考えられる．

以上の如く本2症例は其の臨床並びに病理像が極めて特異なものであるが，斯る病変が如何なる原因で発生したかを考えると，先ず第一には毒物の嚥下が考えられるが，第1例及び第2例共に家族の証言，患者の生活環境等から自殺乃至は他殺又はあやまつて毒物を嚥下する如きことは全然考えられぬ状態であつた．然し第2例では食後1時間後にクレオソート20錠を服用して居ることは問題がある様である．特に本症例では切除胃の組織標本で壊死部に褐色の色素の沈着が認められたことを併せ考えるとクレオソートの関連性を疑わしめるものである．又第1例では胃壁の一部に肉眼的には認め得なかつた癌組織を認めたこと，胃壁に多少の円形細胞の浸潤を認め，更に胃内容より多種多様の細菌を証明したことを併せ考えると，之等細菌感染による急性静脈炎，血栓形成，壊死等も考え得る．併し，何れにしても其の発生原因は明らかでなく，又両者が其の発生原因を異にするものであるかもわからないが．2例共に其の発病時には軽度の食あたりとして自宅治療をしていたものが，病勢は急激に進展し10数時間後には胃壁の著明な壊死と重篤な中毒症状を示し，救命の策なきに至つたことは今後の臨床診断及び治療上重要視さる可きものと思う．

結　　語

我々は急性胃壊死とも云う可き2症例を経験し，其の臨床経過並びに手術所見に特異性を認めたので，斯る疾患の存在することを提示し，其の手術並びに標本の天然色写真を供覧した．

尚，本症例は第22回日本臨床外科医会総会で報告した．

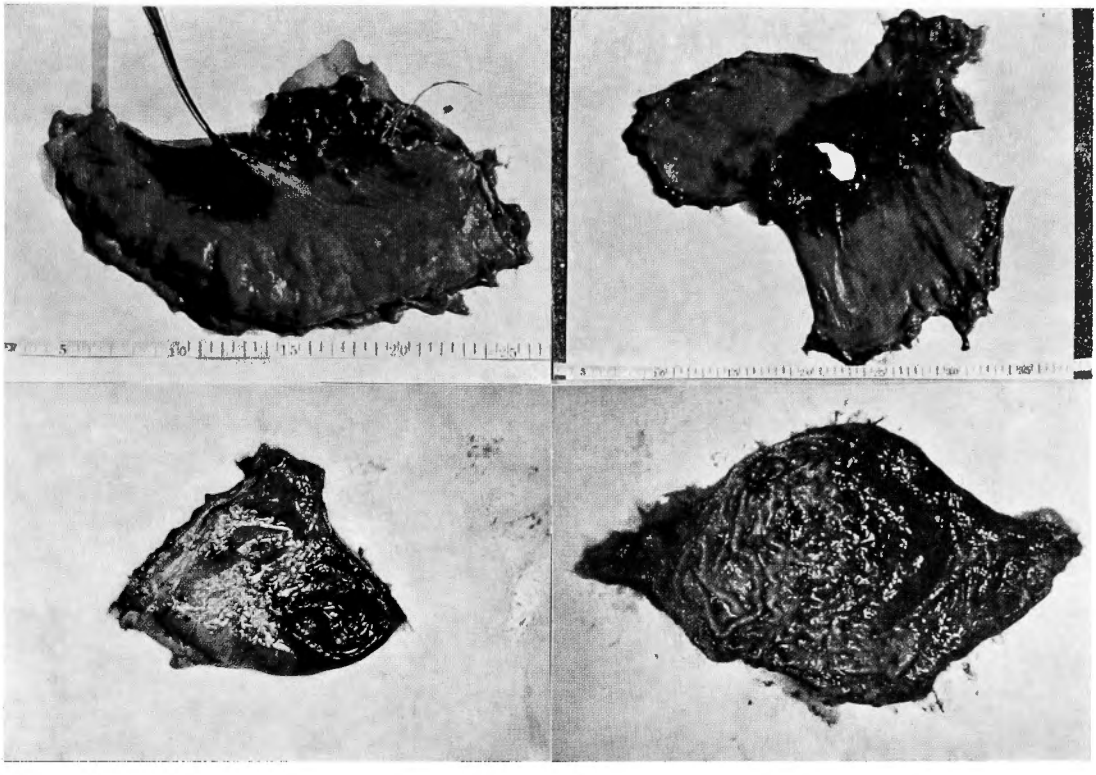


図　2　第1例　切除胃外面
図　3　第1例　切除胃内面
図　7　第2例　切除胃外面
図　8　第2例　切除胃内面

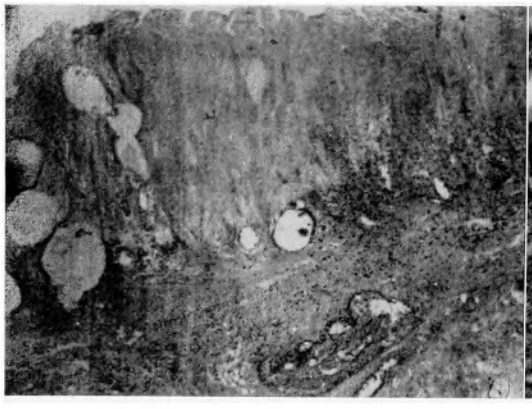
図 1

第1例 手 術 所 見

図 6

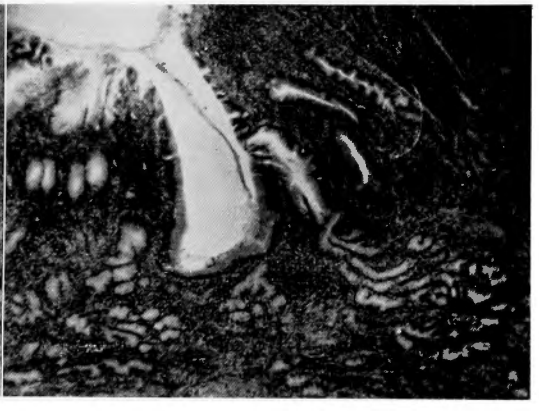
第2例 手 術 所 見

第 4 図



第1例 組織像；胃壁は全層に亘り壊死性変性を示すが炎衝性変化は尠い.

第 5 図

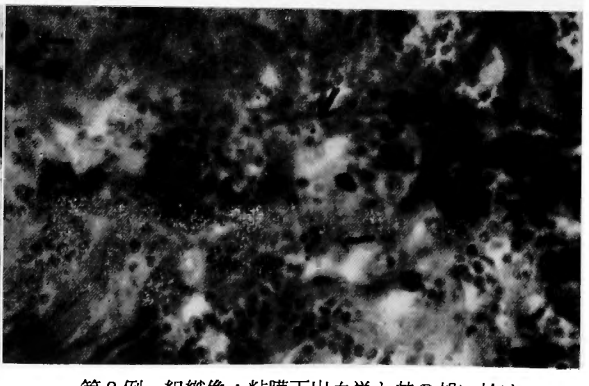


第1例 組織像：粘膜下層の一部に認められた癌組織.

第 9 図

第2例 組織像：血栓形成を示す.

第 10 図



第2例 組織像：粘膜下出血巣と其の部に於ける褐色の色素沈着を認める.（↓の部）