day, while we were busy preparing intravenous pyelography for him, he suddenly vomited gross blood several times with severe pains in his stomach. Immediately we treated him with Ringer's solution, blood transfusion and injected a heart stimulant, absolute rest in bed was maintained and restlessness was controlled by the use of morphin; but his condition deteriorated and died early next morning. Because symptoms were different from acute peritonitis, we got 500 cc. of hemorrhagic fluid by gastric aspiration before his death.

After his death autopsy was performed, and pathologic changes were noted in the lungs, stomach, kidneys, liver, spleen; pleura and pericardium. They were hemorrhagic and infiltrations and degenerative changes. Macroscopic stone formation was not found in the urinary tract, but microscopically it was found many small stones in the tissue of kidneys.

Examination of the blood disclosed a red cell count of 4,250,000 with a hemoglobin of 92 per cent and a white cell count of 7,800, with neutrophils 84 per cent, little lymphocytes 13 per cent, great lymphocytes 1 per cent and irritation form 2 per cent, but basophilic and eosinophilic white cells were not found. The urine sediment contained numerous red cells and crystals of acethyl sulfonamide. No special findings were noted on the other examination.

From these point of views, it is rather difficult for us to decide this case as simply toxic reaction or to allergic reaction.

TWO CASES OF ANURIA DUE TO SULFAMERAZINE.

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In Japan we have few reports about sulfonamide anuria especially, none but one case reported by Takayasu about sulfamerazine anuria. We want to report sulfamerazine anuria which we saw recently. Two cases were observed.

Case 1: Miss. W., 23 years old, farmer, admitted the hospital to have treatment of feces fistula. About eight years ago she had appendectomy and recently the operation's wound turned to feces fistula. The patient was operated but the operation's wound being suppurated, the patient was given Romezine (Sulfamerazine) on March 24, 3 gm; on 25, 5 gm; on 26, 2 gm; thus the patient was given Romezine totally 10 gm in 3 days. On March 27 the patient began to show oliguria, her total urinary output during the day was only 200 cc. The next day, following measures were given in consideration

of toxicity of drug: injections of Ringer's mixture and glucose solution, and administration of diuretics. Her response to the measure was poor and the patient passed no urine. The following day, the patient visited our clinic (Urologic section). On examination, special findings were not noted in her chest, but there were rigidity and dull pain in the right loin. The patient complained of lumbago and loss of appetite, but had not nausea and vomiting; pulse 120, temperature 101 F. Cystoscopy was performed. There was only a small quantity of bloody urine, but no evidence of crystal formation. It was noted that both orifices were pulled up and excreted no urine. Indigocarmine failed to appear in 10 minutes. Catheters were retained in situ and renal pelves were lavaged with warm water.

The patient responded to these treatment rapidly, during the day she voided 200 cc of urine, the next day 400 cc. Thus the patient recovered rapidly, a few days later microscopic hematuria disappeared. The catheters were removed 2 days later and on April 22, the patient was discharged.

Case 2: Mr. Y., 52 years old, business man, 1.5 gm and 1 gm of Romezine (6 hours later) were given to prevent infection due to gingivitis which had been operated on Feb. 28. On March 1, he was given 1 gm of Romezine in the morning and 1.5 gm in the evening, which was followed by hematuria the next morning. He was careless enough to take further 1.5 gm during the day. After that he began to feel lumbago and dull pain in the right side of abdomen. The patient began to show oliguria, and afternoon about 8 o'clock he voided urine mixed with blood clots. A physician was called and diagnosed as acute sulfonamide intoxication and the patient was referred to our clinic immediately.

On examination, his general condition was not remarkable. Both kidneys were not palpable. Cystoscopy was performed, there was only 5 cc of urine tinted with red, and microscopically there were many red blood cells. There was no evidence of crystal formation and bladder was normal in appearance. At right ureteral orifice there was blood coagulum. Both ureters excreted no urine. Indigocarmine failed to appear in 10 minutes. Catheter passed easily to the right kidney and considerable amount of urine tinged with blood flowed out. However, catheter was obstructed at the left side about 1 cm from orifice. Efforts were made to pass the catheter and a few minutes later it passed to the kidney, followed by muddy crystal urine. Catheter were retained in situ. Special finding was not noted in urinary tract.

The pelves were lavaged with warm sodium bicarbonate (5 per cent), glucose, and Ringer's solution were injected subcutaneously. Diuretics, cardiotonics and hemostastics were given (campher, coff. natr. benzoic., urocampher, Thrombogen, vitamin P and K etc).

Relieved the ureteral catheterization the anuria, we gave him large quantity of water. The patient voided 1600 cc of urine the next day, and two days later 2000 cc. His gene-

ral condition was rapidly improved. Catheters were removed 3 days later. Penicillin was injected for the purpose of protecting urinary infection.

Results of examinations in both cases:

1. Serum reactions for syphilis were negative.
2. Examination of blood showed some changes in blood figure, blood pressure and its content of nonprotein nitrogen, which were improved rapidly according to his recovery.
3. Examination of liver function showed normal.
4. Examination of the kidneys; hematuria, crystalluria and anuria were shown, however, albumin and renal cast were not found in urine.

COMMENT

As to sulfonamide anuria several reports were seen in recent American literature. Shapiro, Kleimann reported sulfathiazole anuria and in their cases they urged the importance of early decapsulation. Wishard, Hammer, and Mertz reported sulfadiazine anuria, peritonealdialysis was undertaken for their cases after decapsulation appeared to have failed. There are some other reports by Abeshouse and Hegewann (anuria, crystalluria, hematuria).

Both of these two operations (decapsulation and peritonealdialysis) seemed to have some effects. But we must admit that these have been many unfortunate cases of anuria (toxic, unobstructed) which could not have been relieved even with these operations.

Sulfamerazine is said to have less toxicity on the renal tubules because of its high solubility and less acetylation than other sulfonamide compounds. So far as our cases are concerned, we do not think sulfamerazine doses taken by our patients were not proper. However, the patients began to show hematuria, oliguria and anuria within 2 or 3 days, which could be relieved fortunately by lavage of the pelvis alone.

It is obvious, therefore, that there are some toxic reaction on renal tubules caused by sulfamerazine which in general were thought to be less toxic than other sulfonamide compounds.

Lehr reported recently that one could lessen the troublesome side-effects of sulfonamide and keep proper blood concentration of the drug by using mixed sulfonamide compounds. We have some data in connection with the administration of sulfonamide mixture, and we will report some of them in future.

CONCLUSION

1. We have reported two cases of anuria due to sulfamerazine.
2. These two cases showed to have been recovered rapidly by lavage of the pelvis and administration of diuretics and heart stimulants.
3. Our above two cases caused anuria in spite of the fact that sulfamerazine has less toxicity than other sulfonamide compound (though its dose is observed to be proper). We urged, therefore, that care always should be given when we administer sulfamerazine.

Unfortunately, if anuria should occur, we believe the principle of therapy must be performed step by step. 1. Lavage of pelvis and washing with warm sodium bicarbonate

water. 2. Decapsulation and pyelectomia of the kidney. 3. Intraperitoneal irrigation.
(We wish to thank our Director Prof. J. Namiki, for his invaluable help and advice.)

スロン(帝國臓器製合成女性ホルモン)の大量 投與による前立腺癌の治療

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T, Ichikawa & M. Murakami: Treatment of the Prostatic Cancer with
"Suron(Hexoesterol)" in Large Dosis.

緒 言

前立腺癌に對する抗男性ホルモン療法 Antian-drogenic therapy は最近の内分泌學の治療方面に於ける大發見の1つである。本療法は女性ホルモンの投與と、除睪術という2つの形式で行われる。

此の抗男性ホルモン療法は Huggins の創案したものと知られているけれども、彼より以前に試みた人がある。即ち Ströhm (1935) は除睪術により、Counsler (1936) は睪丸のレ線照射により、又 Kahle & Maltry (1940) は女性發情物質の投與により前立腺癌の呈する臨床症狀を輕快せしめ得たことを報告したが、個々の症例報告の域を脱しなかつたために一般の注目を惹くに到らなかつた。

所が Huggins (1941) が女性發情ホルモン投與及び去勢術によつて行つた前立腺癌治療のまとまつた成績を發表したのを機會に一躍世の注目を浴び歐米に於ては忽ち廣く追試研究され本療法の効果が謳歌されるに至つたのである。歐米に於てかくも速かに本療法が宣傳されるに至つたのには理由があるのであつて、例えばアメリカに就てても、毎年約8000人が前立腺癌のために死亡し本症は男性の癌として胃癌に次ぐ重要なものであるの

である。アメリカ人男子50歳以上のものゝ前立腺癌を組織學的に精査すると30%に於て本症の萌芽もいふべき變化が見られ、此の變化出現の陽性は更に年齢と共に増加するのである。只此の萌芽の發育の速度に大きな差があり、發育速度の遅ために生前臨床症狀を發現しないで終るものが、較的に多いといわれている。

我が國に於ては抗男性ホルモン療法の研究はアメリカに比較すると甚だ盛んでないが、これは前立腺癌患者が歐米より少いことが大きな原因であることは間違いない所である。然しながら我が國に於ける本症も以前に考えられていた程稀な疾ではなく、我が教室に於ても従前は數年間に11をみる程度であつたのであるが、最近約2年間手術及び剖検によつて本症の確認されたものだけでも10例を越える狀況で、直腸内觸診所見のみならず本症を疑う患者まで數えれば更に多く、血清オスファターゼの定量、レ線診斷、前立腺分泌の細胞學的診斷(Papanicolaou)更に試験切片の採取等が普及すれば、我が國に於ける本症患者は益々して今迄考えられていた程少いものではなく、益々抗男性ホルモン療法の恩恵に浴する患者が益々なり増加するものと思われる。

本療法は根治手術の不可能な前立腺癌に對して