

Notes on the following paper.

*The following paper was submitted to the National Archives of the United States, Records of the United States Senate in support of Dr. Gerson's July 1-3, 1946 testimony before the Pepper-Neeley Joint Congressional Subcommittee on establishing a national cancer research center.*

*Dr. Gerson brought with him five patients at his own expense, and presented them to be questioned by the subcommittee.*

*The original paper was typed on a manual typewriter, with the attendant errors, typographical mistakes, formatting difficulties and illegibilities. I have taken the liberty of correcting obvious omissions and typographical errors, and correcting misspellings where they were obvious. Gross misspellings that may have actually meant a word different from the one I assumed, I left as is.*

*I have tried to keep the overall pagination and format as close as possible to the original for authenticity's sake.*

*The fact that this paper is in the National Archives is an explosive force waiting to happen. If a cure is suddenly "discovered" today, and it is similar to the Gerson Therapy, this paper will show that the Gerson Therapy, and literally a cure for cancer, was found and presented to the US Congress over 60 years ago, and has been ignored and suppressed for the sake of profit since, at the cost of literally millions of lives.*

*- Howard Straus, Carmel, CA, September 4, 2006*

CASE HISTORY OF TEN CANCER PATIENTS

CLINICAL OBSERVATIONS

THEORETICAL CONSIDERATIONS

and

SUMMARY

By

DR. MAX GERSON  
667 Madison Avenue  
New York, N. Y.

Case No. 1

Mrs. B. S. age 43, scirrhous carcinoma of the breast, with metastases. This patient had the left breast removed Sept. 19, 1940, at St. Francis hospital, Jersey City, N.J. The hospital report reads as follows:

The above named was admitted to this institution 9/19/40 for a mass in the left breast. An X-Ray report was taken 9/19/40 of ribs and dorsal spine: Examination of the ribs and dorsal spine did not reveal any evidence of bone metastases.

Preoperative diagnosis and Postoperative diagnosis-Carcinoma of left breast; Hard irregular mass in left breast, left of nipple mid-plane; skin hard over the mass - underlying mass attached to the skin.

Pathological Examination - Micro: Sections taken thru the tumor area are infiltrated by intact skin. The underlying areolar tissue is fibrous and contains numerous groups of small papillary cells which are fairly uniform and somewhat hyper chromatic. There is a moderately active scirrhous process throughout the breast accompanied by a moderate degree of inflammatory reaction. The remainder of the breast tissue is similarly fibrous and diffusely infiltrated by tumor growth.

Sections of axillary lymph nodes are enveloped by a diffuse capsule. Most of the lymphatics are filled with tumor emboli. There is wide-spread tumor metastases throughout.

Diagnosis: Duct cell carcinoma. Grade IV, scirrhous type with metastases to axillary lymph nodes.

Patient discharged in good condition, 10/16/40; Wound cleaned and well healed.

Because of a recurrence she went to Memorial Hospital, New York Sept. 8, 1941. Their report is as follows:

Diagnosis: Recurrent Inoperable Carcinoma of left breast.

Remarks: Patient first examined in Breast Clinic on 9/8/40 at which time it was noted that she had no local recurrence but had bulky left supraclavicular mass. This was treated with radium element pack Sept. 1941, patient having received 60,000 mghrs - 8,000 mghrs having been given every other day, with excellent regression of mass. Node discovered in left cervical region in Sept. 1942. This was also treated with radium element pack for a total of 64,000 mghrs. with complete regression of disease.

Disease remained quiescent until July 1943, when patient developed multiple skin nodules over left chest wall in region of scar and medial to it. Low voltage X-ray therapy given to these regions, patient having received 1500r (500r x 3) to left chest wall anterior and left chest wall lateral. At completion of this cycle two additional treatments (400r x 2) were given to left chest wall anterior with complete regression of skin modules. Disease again remained under control until July, 1944, when it was noted that disease in left supraclavicular region was slowly becoming active as well as the mass in the cervical area. It was felt that these areas could not be treated because of proximity to previously irradiated skin.

On July 24, 1944, the patient was first seen by us. She didn't complain much, there was no loss of weight, no pain, she had a good appetite, slept well, but the turning of her head was painful at this time and she was able to lift it with difficulty. There was at the base of the left sternocleidomastoidaeus a hard tumor in the supraclavicular region, attached to the underlying tissue, approximately 10 x 10 x 4 cm in size. A smaller irregular hard enlarged gland was felt at the upper end of the left sternocleidomastoidaeus. The skin above and around the tumor first mentioned was red, very thin and hypersensitive. In the left infraclavicular region there were multiple hard skin nodules, the majority as large as split peas, some a little larger and some a little smaller, as well as a few nodules of similar size in the right infraclavicular area. At this time she was started on the combined low salt, low fat, high potassium diet and. liver therapy.

When seen again after five weeks, the patient reported that the tumor had apparently disappeared slowly within three to four weeks. The smaller gland, however, was still present, though it decreased in size markedly in two to three months, at which time the patient was able to move her head freely and without pain. Urine and blood examinations were normal. The patient stated that she never missed a day's work. Her weight remained stationary between 116½ to 118 pounds, and no fever was observed at any time.

Physical examination on May 5, 1945 revealed the following: all swelling of the hard tumor of the left sternocleidomastoidaeus had disappeared and the tumor itself was no longer palpable. The swollen irregular enlarged gland at the upper end of the left sternocleidomastoidaeus was no longer palpable; all but two of the multiple skin nodules in the infraclavicular area were no longer visible, with the two apparently receding. The skin was

no longer red, but had fine red lines, nor sensitive any longer, was movable and thicker. The heart was normal. The lungs did not show dullness nor any abnormality in breathing. The left sternocleido muscle, formerly as hard as stone, was definitely softer and easily movable.

The patient's general condition remained good.

Case No. 2

Mr. R. B., aged 47, was treated at the Memorial Hospital, New York, in February, 1942, an excision of a tumor being performed.

According to the report from the Memorial Hospital:

The submaxillary tumor was excised in February 1942. It was diagnosed as a "Mixed Tumor".

Three months later the patient expectorated bloody sputum, developed orthopnea plus an irritating cough, as well as very severe pains in the right leg. Bronchoscopy was performed by Mr. David. H. Jones - his report reads:

"The walls of the trachea appeared to be thicker than normal, especially on the right. There seemed to be a bulging both anterior and posterior. The opening of the right bronchus appeared to be oval in shape instead of round as if there was something pressing from the outer wall narrowing the lumen. The right upper lobe bronchus was then examined and there was considerable congestion of the lower wall. The lumen seemed to be patent. The narrowing of the main bronchus was more noticeable after passing the opening of the upper lobe bronchus. The opening of the middle lobe bronchus was oval in shape but seemed to be dislocated outward. Passing down to the lower lobe it seemed to be normal in appearance. Smears were taken from this bronchus. There did not seem to be any fixidity or rigidity which is characteristic of a new growth, but on the posterior wall of the whole right main bronchus there were longitudinal rugae. This was very marked."

(The case was demonstrated in Atlantic City at the International Cancer Congress in 1942 to show how quickly metastases can develop).

The management of this patient by the author was begun on June 17, 1942. The patient was nervous, tongue coated; the heart was not enlarged, the blood pressure 120/72, pulse 88 and regular, his weight 164; "there was slight dullness in the right infraclavicular and middle of the: scapula, with inspiration harsh, expiration prolonged, no rales; the sputum amounted to 3 tablespoons a day, was yellowish dark to red in color and jelly-like.

The X-ray findings and prognose notes were as follows:

Film 1, June 17, 1942. - There is a shadow below the right clavicle. The shadow is dense, ill-defined, the size of a small egg. There are a few strands connecting it with the mediastinum. Otherwise the lungs appear clear.

June 27: Blood was present in the sputum, expectoration was easier, but the patient's breath was foul and he still complained of a bad taste.

July 8: Sputum now about 1 tablespoon daily, less than half the original amount; there were less bronchial irritation symptoms and less coughing, and this in the morning only; he stated that he felt better physically and mentally, was much less nervous, and able to sleep in bed lying down, (being no longer orthopneic); the leg pain had completely disappeared; his weight was 156 pounds.

Film 2, July 8, 1942: - The shadow below the right clavicle is less dense.

Film 3, July 22, 1942 - The shadow below the right clavicle cannot be distinctly seen.

August 24th: No cough, no sputum, bad taste gone, tongue clear, less nervous, weight 160 pounds, normal breathing.

The patient started to work for the first, time in the middle of September 1942.

The Chest X-rays taken after Oct. 13, 1942 first showed no evidence of the lung tumor; subsequent films, on Nov. 12, 1942 and of Sept. 14, 1943 and all later ones also showed no evidence of the tumor, Patient is in apparently good condition at present time, and has been advised to continue to avoid fats and salt in his diet for at least two years, possibly longer.

Case No. 3

K. Fl., 43 years of age, married, no children, was referred to us May 1, 1944 by a Philadelphia physician. Her history was given as follows: She noticed on Nov. 9, 1943 a swelling of the right leg. At the beginning of March 1944, the other leg also became edematous. Sometime before, in February 1944, she observed some enlarged glands, first in the right groin, then in the left, later also on her neck. During the last few months she was increasingly tired; this fatigue advanced to such an extent that she could no longer work, and had to stay in bed most of the time. Her appetite was enormous, bowels moved normally, only occasional constipation. She suffered from severe dizziness, more intense upon arising.

In the course of the treatment she received several blood transfusions and 15 X-ray treatments. Ovarian function ceased as one of the consequences and did not return. On March 13, 1944, she was operated on: three glands were removed from both axillas and another one from the right groin. The report on the microscopic findings read:

The specimen consists of three lymph glands. The largest measures 2 x 1½ x 1 cm. in their largest diameters. They are all encapsulated, covered with a small amount of adipose connective tissue, and solid to the feel.

On cross section, the largest shows a more, or less homogenous grayish structure, mottled pink here and there in the center; while the smaller ones show a more uniform grayish homogenous structure.

The architecture of the gland is largely abolished. There are still some fairly well preserved lymph follicles, as well as the gland capsule. There are some areas of necrosis and hyalinization, but very little if at all, fibrous tissue proliferation. There is considerable



congestion in the centre of the gland.

The elements making up the specimen are mostly lymphocytes some of which show mitotic figures.

The picture in itself is not significant of any definite pathology, since lymph structures respond by hyperplasia of its elements, particularly the lymphoid, to any irritation.

But, taking into consideration the history, the physical examination, the blood picture and the serology, it becomes possible to exclude the following conditions: (after having enumerated all different pathological conditions, it continues as follows;)

There remain only two conditions to be considered in the diagnosis of the tissue, having a microscopic picture as described above, namely:

1. Lympho-sarcoma - lymphocytic type
2. Hodgkin's disease

The uniformity of the cells of the lymphocytic type to the exclusion of eosinophiles, plasma cells and fibroblasts or mature connective tissue, as well as the small amount of necrosis, would favor a diagnosis of lymphosarcoma rather than Hodgkin's disease.

Examination May 1, 1944, revealed some small hard glands in both groin and several larger ones at both upper sternocleidomastoidei. In the abdomen large tumor masses were palpable. Two could be separated, one in the upper left area, the other in the lower right, both-almost the size of a fist. (See X-Rays). The latter felt lumpy.

Urinalysis showed no albumen nor sugar, but microscopic examination revealed 8 - 10 pus cells p.h.p.f. and occasional red blood cells.

At the end of May, the abdominal tumors were greatly re-

duced and the above mentioned glands became softer, but very tender. In the middle of June, most of the glands were greatly reduced or had disappeared and the tumors in the abdomen were no longer palpable, but their absorption was followed by a serious anemia, (see Table 1) combined with great weakness and increasing flushes with perspiration, as with menopause). At the end of July, the patient stated that she felt a great deal stronger but complained about pains in almost all bones and joints and about continued menopause flushes with perspiration and transient prostration. At the beginning of September 1944, she regained energy and her normal disposition and so much strength that she could resume her housework, but the perspiration returned in longer intervals during the day, more severe at night. These did not respond appreciably to administration of ovary substance, but interestingly enough disappeared when large doses of brown sugar and glucose were added to the diet. She reported that several bleedings occurred after intercourse, which later did not recur.

At the end of October there were a few hard right inguinal glands the size of an almond present, plus a few small hard left inguinal glands. The bilateral leg edema was no longer noticeable having disappeared completely. Her general condition apparently returned to normal. Some hypersensitivity of both elbows and knees remained as well as transient postural dizziness experienced on arising. The most recent physical examinations, in early December, 1944, and in May and June 1945, disclosed almost the same clinical picture. In her words, the patient resumed a normal life "by means of the dietary treatment"; she was advised to continue her diet for at least one more year.

In June, pus cells alone were found on urinalysis, 40-50 P.H.P.F. which later were reduced to a normal picture.

The changes in the blood picture are shown in the following table:

	May 1, 1944	June 13	June 27	July 21	Oct. 31	Dec. 6
Erythrocytes (-,000)	4,100	2,120	2,850	4,650	4,670	3,980
Leucocytes	5,400	2,600	6,300	6,500	4,050	7,250
Hemoglobin	70%	43%	65%	84%	83%	88%
Segm. Nuclears	52	50	51	62	53	61
Lymphocytes	34	38	39	28	40	26
Monocytes	5	6	8	5	5	4
Eosinophiles	2	1	-	2	-	-
Basophiles	2	-	-	1	-	5
Bands	4	4	2	2	2	4
Juveniles	1	1	-	-	-	-

Case No. 4

Mrs. A.H., Age 38, had 3 children, no miscarriages, gave the following history: in Nov. 1940, an endometritic retroflex uterus was operated on and a fixation done under spinal anesthesia. From that time on, she suffered from pain in the sacral region and back. In Oct. 1941, fusion of the right sacro-iliacal joint was performed. As the pains increased in severity, weakness of the lower extremities became apparent with almost complete paralysis finally. Neurological studies revealed the presence of tumor involvement of the spinal cord. In Oct. 1943, laminectomy performed, some tumor tissue removed and examination revealed a tumor made up on "acini of spindle cells, arranged on filamentous papillary stroma. The tumor cells had large vacuolated nuclei, some of which were pyknotic and also contained a few mitotic figures. The type of growth was suggestive of a carcinoma rather than a tumor. Diagnosis: Primary meningeal, secondary papillary carcinoma, possibly primary choroid plexus, (ependymal cell) tumor". Retention of urine with urinary bladder spasm occurred, necessitating catheterization twice daily. She could not defecate voluntarily. No relief was obtained after the operation, at which only some parts of the tumor could be removed, but increasingly severe pains in the back and pelvis occurred. Menstruation stopped for 3 months after supplementary x-ray treatments. The patient was confined to bed, with both legs almost entirely paralyzed. The left thigh and both feet could be moved slightly in the prone position. The right patellar reflex was missing, the left one very weak. Both Achilles tendon reflexes were missing, but the plantar reflexes were present, though somewhat decreased.

There was no bladder control at night, part control during the day. Skin sensitivity on the right leg was normal, some areas being hypersensitive, others hyposensitive or non-sensitive.

The combined supportive treatment started October 1943. There was a rather quick improvement, for in four weeks the patient was pain free and able to sleep without drugs. After 6 weeks, the catheter was removed, but she had difficulty in controlling micturition and in defecating. After three months, she was able to walk and do her housework to a certain degree, but needed a cane most of the time. The patellar reflexes were not restored, skin sensitivity was somewhat improved, as was the ability to defecate normally. Bladder control was lacking at night, urinalysis normal. She was able to sleep well again, and her appetite was normal. The patient's strength was enough improved that she could do more housework. After one year of treatment she felt so strong and safe that she thought the treatment was no longer necessary. But within 3-4 months of abandoning the saltless fatless diets her condition deteriorated and she had a recurrence of her difficulty in walking and doing her work. On returning to the combined diet, her strength returned and difficulty in walking disappeared. The bladder remained partly uncontrolled, especially at night.

This patient cannot in any sense of the word be considered a "cure", but she is able to carry on her normal life in a rather comfortable fashion without opiates, by being adequately and vigorously supported at all times by the continued saltless, fatless, liver-potassium diet.

The radiological examination of Mrs. A. H. has revealed the following findings:

Films of May 19th and Oct. 25, 1941 - there is no pathology on the antero-posterior and lateral views of the lumbar spine. Film of Jan. 22nd, 1943 - third, fourth and fifth lumbar vertebrae show a decreased density (porosis). The pedicles are not distinguishable. The processes spinosae of these vertebrae are absent.

Film of Sept. 23, 1943 - same as above.

Films of Oct. 10, 1943 - myelography shows "a stop at the level of the middle part of the third lumbar vertebra. The lower end of the shadow produced by the contrast-giving dye is convex in an upward direction." (Characteristic finding in tumor blocking opinal canal).

Films of Feb. 11, 1944 - the contrast-giving dye is somewhat lower than in the former films. The amount of the contrast-giving dye is decreased. The third, fourth and fifth lumbar vertebrae appear of normal density.

X-ray taken by Dr. F. of Pittsburgh on Feb. 11th, 1944, reads:

"Examination of the lumbar spine shows removal of the spinous processes and laminae of the second, third and fourth lumbar vertebrae. Opaque material, probably lipiodol, is found around the borders of the neural canal. The appearance would suggest a mass within the neural canal, deflecting the opaque material around it. It may completely block the neural canal. The laminectomies have widened the neural canal in that region. There is a marked osteo-sclerosis about the laminae and spinous processes about the fifth lumbar and first sacral vertebrae. This sclerosing process may have been the

result of a previous operation. It may be blocking the neural canal, at least to a degree, and probably is making some pressure on the spinal nerve roots in this region. The condition shows no evidence of malignant infiltration.

Case No. 5

M. S., 52 years old, single, gave the following history:

It started in 1927 with two wart-like tumors, one at the right shoulder, the other at the left chest. One was removed, the other treated with radium with no recurrence. 1936, one tumor at the right lower eyelid was removed in London and the wound grafted with patient's skin from the thigh. Again no recurrence. In December 1941 there was an ulcerating tumor at the left lower lid, treated about one year in Johns Hopkins Hospital, and at the Kelly Clinic in Baltimore.

The report reads:

1/3/42 Tonsillectomy (Operator Dr. Cr.)

1/26/42 Operation: Biopsy of Basal cell epithelioma. (Operator Dr. A. C. W.)

1/19/42. Dr. L. W. K's. note: This patient presents numerous pin point to split pea sized deeply pigmented lentigenes over his entire body, which he states began to make their appearance first in 1927 when he was exposed to the sun a great deal. At this time he was also taking sodium cacodylate and he states that Prof. Bloch in Zurich thought that the combination of this drug and sunlight might have been responsible for this condition. The patient believes that all of the pigmented spots being as little red points which later become scaly and then disappear leaving the pigmentation behind. Some of these apparently produce basal cell epitheliomas since several lesions have been removed by radiation and other methods which were said to be this condition.

Biopsy specimen from: 1. From the red lesion on the right shoulder.

2. Deeply pigmented smooth lentigo on the abdomen.

3. A lcm. sized scaly lesion on the back which looks like an ordinary seborrheic keratosis.

2/11/42: Dr. W's note: there is a slight defect in the margin of the left lower lid where the epithelium was removed. On the nasal side there is a little hard nodular mass involving the puncta, which I think is quite clearly residual tumor cells. There is a small nodule on the temporal side of this lid defect, which may or may not be tumor cells. I think both areas should be thoroughly irradiated.

Reports from the Kelly Clinic, Baltimore, to the patient:

April 20, 1942. - When I first saw you on January 30, 1942, Dr. A. W. had operated for what he thought was chalazion on the lower left eyelid. The microsc-



pical section, however, showed the condition was epithelioma. The character of the epithelioma, which was a basal celled type, indicated it probably came from one of the hair follicles. At the time, you had been getting sulfadiazene for pneumonia.

On examination, there was a defect in the lower eyelid and some thickening, and for the lesion on the eye, I gave you two treatments. The first treatment was given on February 12, 1942. The applicator was a small bulb, about 3 mm in diameter, in a brass capsule 2 mm. thick. The amount of radon was 700 mc., the time of exposure was 11 minutes, and the distance of the radon bulb from the eyelid was 5 mm.

On the 19th of February, 1942, I used 690 mc. in the same kind of an applicator, for 10 minutes. This amount of radiation is not enough to cause any change in the normal structures of the lid, other than perhaps removal of the hair follicles.

Nov. 16, 1943.

This letter is supplementary to that which I wrote you on April 20, 1942.

On October 11, 1943, you returned to me and I found a recurrence of the small epithelioma near the center of the left lower eyelid, on the mucocutaneous junction. This was treated with radium, with proper screening of the eyeball. At that time the actual dosage given with 644 millicuries at 1/8", approximately 3 mm. for 10 minutes.

On your return on October 20, I found this lesion almost well but a definite swelling near, the inner canthus of the lower lid. This was treated at a distance of five mm. with 766 millicuries for eight minutes. In addition, the site of the original lesion was given Beta radiation with a bare bulb, with 126 millicuries for forty seconds. Today I find the eye looks very well.

Jan. 28, 1944.

On January 5, 1944, you came over from Dr. A. W. with a little return of the lesion on the central part of the eyelid, on the area that was treated on October 11. A treatment was given here on January 5, and the dosage was contact unscreened radiation, 120 millicuries for 1½ minutes. The size of the portal was about 6 millimeters.

Another treatment was given on January 25, 1944, and the dosage was 153 millicuries for eighty seconds and the size of the portal was six millimeters.

I would ask you to return to us in approximately 4 weeks.

There was a recurrence at the original site in the left lower eyelid in October 1943, treated 3 times with radium, the third time without result.

My examination Feb. 21, 1944 showed a defect of the left lower eyelid and ulcer formation on the mucocutaneous junction.

There was a small tumor, strongly vascularized and nodular, located temporally to the papillae lacrimalis, resembling the shape of a cauliflower. The conjunctiva was thickened, showed hyperemia with pus secretion while the cornea presented in the respective quadrant pericorneal injection. The eye could only be opened with difficulty, because of spasm of the orbicularis palpebrarum. The patient showed, in addition many other small tumors as above described, partly pigmented (see photograph). He has a healthy, well-nourished appearance, is strong, has a good color, sleeps well, but has a tendency to constipation. Examination in the French-American Hospital revealed after a meal of 200cc of cream that the gall bladder empties slowly. The cholesterol content in blood on Dec. 30, 1941 was 261 mgm% (the Johns Hopkins Hospital) but two months after the beginning of the treatment in May 1944, it was only 160 mgm%.

The treatment started at the end of February 1944. During the first week the tumor turned a purplish red and grew to double its original size, probably due to hyperemia (as could be seen under a magnifying glass). Suddenly within a 24-hour period, the tumor dried out and fell off. Within 6 weeks the ulcer was closed but showed at the basis of the tumor a small hard swelling the size of a pinhead. The pericorneal injection disappeared in a short time, the secretion stopped later and the conjunctiva became almost normal, so that the patient no longer needed dark glasses as protection against irritation of light. The blepharospasm disappeared in about 6 weeks, and in about three months

he could use the eyes normally. The thickened scar formation is nearly absorbed.

The ophthalmological report of March 29, 1945 of Dr. Kleefeld who observed the case closely during the combined supportive treatment reads:

"Without turning the lower lid, the lachrymal point is attracted temporally by the scar tissue, temporally located. Cicatricial folds in the skin. The margin of the lid misses its cilia, but is straight and thin, somewhat discolored. No scars whatsoever. Attracting this lid downward, one sees the hypervascularization of the lachrymal point, then: glossy projection very flat, measuring about 6mm. and divided by a vertical furrow. Vessels are seen by transparency. Then vessels reappear temporally. It looks like a hyaline degeneration.

The fact that this tumor has regressed, at least for the present, has been extremely important to the general well-being of the patient. His whole attitude towards life has changed for the better and we feel that once again the combined salt-fat-free, liver-potassium diet has ably supported this patient, and that any time he has which is free from, further malignant tumor formation is an extra dividend for him.

Case No. 6.

Mrs. M. R. Age 52, with a recurrence of carcinoma simplex of the breast plus metastases, was seen first on Feb. 24, 1944. She gave the following history: Chronic accessory nasal sinusitis, "nervousness", and radical mastectomy, right side, on December 9, 1942, by Dr. Walter Goldmann. His operative report reads: "On Dec. 9, 1942, I performed a radical resection of the right breast and axillary nodes. The diagnosis of the pathologist was the following: carcinoma simplex of the breast, Grade 2, with metastasis to the axillary lymph nodes. The patient had an uneventful recovery. In January and February 1943 the patient had a series of X-ray treatments as outlined by Dr. I. Arons. Further observation in 1943 did not show any sign of a metastasis."

In June 1943 uterus and both ovaries were removed at a second operation. (Menopause had started years before at 38 years of age with moderate symptoms, later increasing in severity). After the second operation loss of appetite set in, first with nausea, later vomiting. She was depressed, irritable, very weak, easily tired and her weight had fallen from 112 to 96 pounds.

The combined supportive treatment was started February 24, 1944, at which time the patient had marked pallor, was emaciated, and her head and hands were shaking almost as if paralysis agitans were present. In the middle of the right breast at the typical operation scar there was an ulcer, covered with a crust the size of a quarter. There were small but hard lumps in all lobes of the left breast. She complained of persistent pains in the gallbladder region, gas pains, difficulty in breathing

with a sensation of deep soreness in the depth of the lungs.

Vomiting stopped after ten days, and after a period of two months she could eat and drink larger amounts of food.

On March 10, two small enlarged lymph glands were observed in the right axilla, one gland in the left axilla and a small one at the lower insertion of the left sternocleidomastoidaeus. The tumor in the left breast decreased slowly in a period of four months and became harder; the enlargement of the axillary lymph nodes disappeared within four to six-months. The ulcer at the operation scar showed after an interval of several weeks redness, a moderate swelling and serous secretion. Finally the crust disappeared and granulation tissue grew which was covered later by skin. In its middle there remained a pinhead-sized area of redness, still scaling, and showing ramification under a magnifying glass. In July 1944 several so called "flare-ups" occurred showing the following symptoms: fever lasting 2-3 days from 100 to 102, black stools with a putrefactive, very foul odor, severe gas pains, and a kind of prostration. In spite of these reactions the patient gained a little weight (up to 101½ pounds). Improvement was slow and interrupted by more flare-ups, limited mostly to abdominal symptoms; also painful menopause symptoms set in, such as dizziness. Headaches, flushes with perspiration and sometimes hunger pains (see x-rays). The persistent deep lung pain disappeared after about six months and did not come back whereas the flare-ups in the upper abdominal region still returned although in a milder form.

At present the patient states that she feels stronger and

is doing her daily housework which she started after five months of the, treatment. Her weight is 107½ pounds. She is still nervous but looks better and is more confident. Occasionally she complains of generalized bone pain, most severe in the sacrum and the ribs.

The fact that this patient improved at all certainly suggests that the combined low salt, low fat diet and liver therapy should be available to all such patients.

Case No.7

Miss V. M., age 53 with a carcinoma of a urethral diverticulum, was first examined Nov. 4, 1944, and gave the following history: During the last years she had been drinking heavily. Her illness began eight to ten months ago with chronic cystitis symptoms; there was at first some irritation and later frequent urination, sometimes with a bloody discharge. Utropin medication helped a short time only. The following is an abstract of the urological record (Kurt A. Heinrich): "Patient was first seen Nov. 20, 1943. She complained of frequency of urination for the past five weeks, once every hour during the day and 8 times during the night. Patient also complained of cramps in her stomach when she had the desire to urinate; she could pass only a few drops. Nov. 20, 1943, cystoscope easily introduced. Trabeculation and many small diverticula seen Dec. 29, 1943, Emergency call. Patient cannot urinate. 650cc of residual urine. Dec. 30, 1943. 1000cc of residual urine. At the end of the catheterization, 15cc of thick pus was evacuated. Diagnosis: apparently periurethral abscess, which was situated between the vagina and bladder neck, opening toward the bladder neck by insertion of the metal catheter. Nearly daily catheterization. Jan. 6, 1944, one ounce of yellow clear residual urine. 30cc of bloody fluid evacuated from abscess or cavity between the urethra and the vagina (periurethral abscess or infected diverticulum). Jan. 24, 1944. Operation: inserted four wing catheter #18, longitudinal incision in anterior wall of vagina. Enucleation and dissection of fibrous mass the size of a walnut (like prostatectomy). Oct. 10, 1944, inspection of vagina shows ulcerated mass, the size of a dime,

at the anterior wall, which bleeds easily.

Report of Biopsy reads: "I have recut tissue blocks in the case of Miss V.M. I find evidences of ulceration of the bladder surface and cords of carcinoma cells. I think you are dealing indubitably with a carcinoma of the bladder. Final diagnosis: Carcinoma of diverticulum of the Urethra."

Miss M.'s physician, Dr. L. L. Brauer, stated that she was treated with needles of radium and X-rays; despite that, the pains increased and ulcer formation in the vagina developed. This ulcer extending during the following months to the size of a half dollar, circumwalled by a large hard rim. Patient complained of having the feeling of liquid in the vagina, but had rarely a little bloody discharge. Menstruation stopped a year ago with no menopause disturbances. She complained most that she had to urinate after dinner and during the night almost every hour, whereas the urination was almost normal during the day. Patient was in good condition, well nourished, but her face was puffy and lips a little cyanotic. She was nervous and depressed.

When first seen on Nov. 4, 1944, examination revealed in the vagina just behind the urificium uretra an ulcer one inch long and half an inch wide, surrounded by a thick hard wall, in the middle easily bleeding necrotic tissue. Laboratory examination of catheterized urine showed a trace of albumin, numerous pus cells, ten to fifteen red blood cells p.h.p.f. and some renal epithelium cells.

The combined treatment was started at this time. During the first weeks of the treatment, the urine contained more red blood



cells which later also disappeared. At the same time, there was no albumin to be found.

A urological report of March 23, 1945 reads:

Cytoscopy: cystoscope\_Charriere #17 introduced with slight difficulty, due to the stricture in the posterior urethra. Slight bleeding occurred as usual. Urine, pinkish in color due to the presence of blood. Could clear up bladder with irrigations.

Bladder wall is pale.

No tumor seen.

Bladder is not completely round which is probably due to adhesions from the outside.

Gyn. Examination: Reveals that the tumor which could be felt at the anterior wall of the vagina has decreased in size and did not bleed during the examination.

It is interesting to note that during the treatment, the patient developed at first generalized weakness and symptoms of secondary anemia, showing 2 900 000 red blood cells, 8 750 leucocytes and 56% hemoglobin, but later the weakness disappeared and a report on April 26, 1945, gave the following results: Erythrocytes: 5 020 000, Leucocytes 7 300, Hemoglobin 76%.

The last urological report, April 26, 1945 shows on clinical examination no ulcer, half of surrounding rim disappeared. Patient is in apparently good general condition, feels stronger, has no complaints and urinalysis at present remains negative.

Case No. 8

Miss S. F. 36 years old, with Hodgkin's Disease, was first seen Nov. 24, 1943, and gave the following history: Oct. 1941, patient observed some swollen glands at her neck. In Feb. 1942, these glands increased in size and some other glands swelled. At this time a biopsy at the Jewish Hospital, Brooklyn, revealed Hodgkin's Disease. X-ray treatment was applied, helped for one year. At that time, a chest x-ray was incidentally showed involvement of some new glands at the left side of the neck; nine x-ray treatments were applied subsequently, but no improvement ensued. Patient started to cough, sputum was negative. She was easily tired, weak and her face started to swell at the left side only; there occurred a swelling of the right arm. The examination showed that both lower eye lids were swollen,. Also the right arm was somewhat swollen, but the left side of the face seemed to be normal. She complained mostly of weakness and exhaustion on slight exertion. She had a good appetite, however with no loss of weight, rare headaches, normal bowel movements.

At the left side of her neck, there were three almond-sized glands, and on the right side in the supraclavicular area another group of swollen glands. She was started on the combined salt-fat free, high potassium diet and liver therapy, and at the end of six weeks, she' stated that she felt stronger, was no longer as easily tired. and could accomplish her secretarial work once more. Coughing stopped after two weeks; she was less nervous, slept better. The swelling of the supra-clavicular glands disappeared, whereas the other glands (left cervical) could still be felt, though much reduced in size. Two months later, no glands were palpable, and the chest x-ray no longer revealed any abnormality of the cervical glands.

Case No. 9

Mrs. H. K., age 37, with infiltrating duct carcinoma of the breast and metastases, gave the following history: She underwent a right radical mastectomy on May 14, 1942, at the Memorial, Hospital, New York City.

The report from this hospital is as follows:

Pathological report: "Infiltrating duct carcinoma; grade 2; metastatic to all levels."

Post operative X-ray therapy; 2000r to each of two axillary ports, anterior and posterior; 1750r to axilla direct, 250K.V. machine; 1500r to each of two chest wall ports, anterior and lateral, 120 K.V. machine.

Patient remained free of disease but in July, 1943, she complained of pain in the right hip and right lower spine. X-ray films taken 7/8/43 revealed no evidence of bone destruction or carcinoma metastases in lumbar spine and pelvis. However, pain persisted and patient was treated with x-ray therapy, having received 1200r to each of two right pelvic portals, anterior and posterior, with complete relief of pain.

Last Known Condition: Examined on clinic on 2/21/44 at which time examination revealed no evidence of disease.

The patient was first seen by us March 6, 1944, at which time physical examination revealed the following: no abnormal findings except radical right-sided mastectomy and persistent vomiting secondary to intensive x-ray therapy.

Laboratory examination showed no abnormal findings. The patient was placed on the salt-fat free, high potassium diet at this time. which was discontinued after four weeks. The vomiting ceased at the end of the second day.

The patient was next seen in January, 1945. Physical examination at this time revealed the presence of two tumors in the left breast, one soft and movable, the other hard and attached to the underlying tissue, but not to the skin. The left nipple was retracted. In the left axilla there was a perpendicular chain of four palpable glands, and the two lower ones each as large as half a hazelnut. the upper ones slightly smaller. She complained again of persistent pain in the right leg and also, incidentally, of pyorrhea of more than three

years duration, brittle nails and tinnitus. She was unable to stretch the right leg due to pressure symptoms on the femoral nerve roots; also she walked only with a cane and then with great difficulty. Circumference of the thighs were: right, 16.4 inches; left, 15.7 inches; of the calves: right, 12.3 inches, left. 12.7 inches. (This atrophy of the right leg appeared in the last year or 80 and was grossly apparent also; however, the patient had limped somewhat since early youth due to an extreme degree of pes planus.).

Interestingly enough, both breast tumors had almost disappeared in three to four weeks, but one began to reappear shortly after the patient had used by mistake for pressing vegetable juices, a bag which had contained mothpowder; following this poisoning for a few days she developed severe vomiting and headaches, an increase in tinnitus and generalized muscular aches and pains. Two weeks later this tumor had definitely increased in size. Two of the four involved axillary glands were still enlarged but smaller and softer; however, the pains in the right leg ceased but the patient still limped and was unable to lift her right thigh.

By the end of March 1945, the patient stated that she felt stronger, her nails were better, the pyorrhea was improved, and the ringing in her ears had disappeared after one week. She was able to walk somewhat better, but when lifting the right leg, she had to support it with her arm. Laboratory examination showed the following:

Urinalysis: no sugar, no albumin, but twenty pus cells per h.p.f. and ten to twelve red blood cells and about the same amount of squamous epithelium cells.

Blood Counts Erythrocytes 3 960 000, Leucocytes 9 350, hemo-

globin 89%, Segm. nuclei 61%, lymphocytes 34%, monocytes 1%, bands 2%.

X-ray (Dr. Borak) shows typical bone metastasis in the right upper hip bone.

In May, 1945, the pains in the right thigh had decreased greatly, the patient could lift her thigh fairly well, stretch the lower leg and walk without a cane.

Case No. 10.

Mrs. C. P., age 70. was first seen by us on Feb. 11.1944 and gave the following history: six months ago she felt an itch at the right side of her neck. One month later she noticed a swelling of the neck and throat, which grew rapidly. After various treatments she went to the Memorial Hospital where she received 24 x-ray treatments. The report from the Memorial Hospital reads:

Mrs. C.P. was first seen in the Head & Neck Clinic Nov. 1, 1943 at which time she was found to have a stony hard mass in the right neck. In addition the larynx was found to be displaced to the right by a somewhat red, non-ulcerated nodular mass in the right pyriform sinus extending posteriorly to the cricopharyngeus muscle. Aspiration biopsy of the right cervical mass was reported to show adenocarcinoma suggesting primary thyroid. A biopsy taken from the mass in the right pyriform sinus was reported to show papillary adeno carcinoma, grade II, thyroid type.

The patient was given a course of x-ray therapy as follows:  
11 treatments to right neck; 10 x 8 cm field; 250r, total 2750r.  
9 " " left " ; 4 cm field; 400r, total 3600r.  
Factors: 250K.V.; 1.5 cu.; 50 cm. t.s.d.

This was followed by good regression of the neck mass and some regression of the mass in the right pyriform sinus. X-ray therapy was to be continued but the patient failed appointments between Dec. 6, 1943 and March 7, 1944. When seen in March the mass in the right neck was found to have regressed but the mass in the larynx showed very little regression. The patient was given an appointment to return for the insertion of gold seeds. However, the patient has not been seen since this last date.

The patient's son was informed at this time that the microscopic examination revealed cancer, but that the tumor was inoperable because it engulfed a great artery and vein. Her weight fell from 120 pounds to 100 pounds, swallowing became difficult, and in the last week or so, her voice had become a whisper.

Our examination, Feb. 11, 1944, revealed a hard tumor of the thyroid gland, the size of a small apple, with the right half the larger. The tumor was nodular, extending far posteriorly and surrounding the great vessels of the neck. The patient was placed on the combined supportive treatment at this time. In about two weeks she was able to swallow again and in four weeks could talk without difficulty. The tumor became smaller, she gained 21 pounds, and in

two months she grew stronger and began to do her housework. The tumor was greatly reduced in size and softer. The patient feeling well and at this point: she discontinued the dietary supportive measures and the crude liver injections.

The last examination on Dec. 15, 1944. revealed that the tumor is reduced to one-third, especially at the right. The surface is even; it is very hard, and is fixed on the larynx. She can eat and speak without difficulty at present. This was her reason for giving up the dietetic treatment after two and a half months.

Her first x-rays showed a deviation of the trachea to the left, which is still present, though perhaps less pronounced in the x-ray.

## CLINICAL OBSERVATIONS

The frightful collection of obstacles standing in the way of improvement of any nature was present in one or another form, mostly in combination, in more than 60% of all the patients, while less than 40% had minor or negligible complications only. Of the cases described above, Nos. 2,3,4,6,9 belong to the first group while Nos. 1,5,7,8 and 10 belong to the latter.

The patients of the latter type had, during the absorption time, comparatively little trouble, - merely headaches for a few days or nausea, and loss of appetite, or diarrhea, or a pronounced weakness in muscles and joints. All of them complained that, at intervals, for a few days at a time, they eliminated unusually large quantities of urine and excreted foul smelling stools as black as coal. Microscopic examination revealed occasionally some bile duct cells, whereas chemical examination showed inspissated bile.

Although all the cases described and many others had had recurrences and most of them metastases, they could manage the situation well enough not to lose a single working day during the absorption time, the length of which varied from a few weeks to about ten months. This period is considerably reduced by increasing the amount of niacin as observed in many subsequent cases to be published later. There were mostly favorable reactions to the treatment of the 40% group, possibly due to the fact that the liver was only functionally damaged so that only a restoration of some deficiencies was necessary.

Entirely different is the clinical picture of the other group of patients, with more or less advanced organic liver disease, a few after abuse in alcohol, others with longstanding digestive trouble or tendency to anemia. The majority of these showed evidence that they had more or less developed biological weakness of the absorption and-elimination-apparatus, which found expression clinically in the



following conditions:

- a. Hypersensitivity of the stomach with hyper- or hypo-acidity.
- b. Some food allergy
- c. Liver and gall bladder trouble
- d. Constipation or a tendency to diarrhea
- e. Chronic sinusitis or bronchiectasis
- f. Striking menopause conditions
- g. Chronic nephritis and cystitis with or without enlargement of the prostate
- h. Anemia, hyper- and hypochromic in type
- i. A state of starvation occurring in some advanced cases, thus producing the clinical picture of cachexia----

For this type, the absorption and elimination period is a very difficult and even critical one, imposing a heavy additional burden on the organs of absorption and elimination, including the liver and the kidneys. Clinically, it is a picture of severe poisoning almost similar to that of an unchecked infectious condition or of a metabolic toxemia. Some of these patients complain about continuous pains in the liver area, cramps in the intestinal tract, and pain at sites of inflammation. These patients seem much benefited by enemas with chamomile tea, mixed with 20-30 drops of a 10% solution of caffeine potassium citrate which should be repeated at intervals of 3-5 hours, day and night if necessary.

This method (first described to the author by O. E. Meyer, Goettingen) probably promotes elimination through opening of the bile ducts previously contracted. Well liked by the patients for their palliative effects are hot wet compresses applied to the abdomen over the involved areas, and drinks of hot peppermint tea or juniper tea, mixed with a large amount of brown sugar, glucose, maple sugar and a little lemon juice. In addition, large amounts of bile powder in

capsules are prescribed (up to 10 or 12 capsules a day), daily liver injections of 2cc Crude Liver Extract, injected intramuscularly and large doses of niacin (50mg 5-6 times daily). At this stage all efforts must be concentrated on improving and stimulating the elimination of toxic absorption products by way of the gastrointestinal tract, urinary tract and skin, in order to prevent dehydration from skin, connective tissue and serum, which can result in toxemia.

To accomplish this important elimination consistently, it is highly essential during this period of hyperemia and absorption, to supply the body with large quantities of fluid in the form of fruit and vegetable juices, with additional glucose (honey, brown sugar, grapes) the special soup and the teas above-mentioned. Because of hypersensitivity of the intestinal tract in some individuals, the juices must sometimes be mixed 50% or less with gruel (special strained fluid oatmeal). In emergency these may have to be administered by the Einhorn tube, or by the Murphy drip, since the patient is in great danger if, for only one or two days, not enough fluid is available for the elimination. One patient after a single day of diminished fluid intake fell into a coma. Another did the same after two days. Both recovered after sufficient retention enemas and the Murphy drip had been applied.

After about 3 to 4 weeks of this intensive supportive treatment, about half of the patients of this group have attacks of fever, from 100 to 102.50 lasting two or three days or longer, recurring anywhere from two to six times in a period of a few weeks up to eight months or longer.

As to weight: most of the patients lose 2 to 4 pounds of body weight in the first 3 to 4 weeks, some later gain 4 to 10 pounds. The amount of weight lost depends on various clinical factors, such as absorption of edema, ascites, pleuritis etc. In case No 1, the weight remained between 116½ and 118 pounds; some cases regained the loss of weight (Nos. 2, 6, 10) some were glad to lose excess weight (Nos. 3 and 7); some gained additional weight (Nos. 6, 8)

A characteristic feature noticed to occur following the regime was that the majority of the patients underwent a marked change of their general appearance, with a change from a pale sallow skin, loss of skin tonus, and anxious facial expression to a normal pinkish skin coloring, improved skin tonus, and normal facial expression. This transformation is accompanied by an improved appetite, lessening of pain, and the gradual return of natural sleep.

Some patients on this diet show hypersensitivity against excessive Sunlight or sunbath, therefore it is advisable to warn patients against the effects of overexposure to external ultraviolet.

One of the most difficult tasks for the physician and patient alike is the withdrawal of all sleeping or pain reducing drugs, such as Luminal, nembutal, morphine, scopolamine, pantopon, laudanon, novocain (used by dentists) and all others. If drugs are not discontinued, the treatment is almost fruitless: if such injections were given within 4 to 8 weeks of the treatment, the effect was fatal in 2 to 6 hours. I observed 8 deaths after such injections, one death in 2 hours after 0.01 morphine injection.

We found that the insomnia of many of these patients was apparently benefited when they were given before retiring 2 capsules of Vitamin A and D concentrate and a Large glass of orange juice with glucose added. Some used also 1 to 2 aspirin tablets as anodynes at night with no ill effects. If the pains were not sufficiently relieved, Phosphorous compound

powder, 4 to 6 teaspoons a day, had to be used, combined with large doses of nicotinic acid. In the last months, these disturbances and difficulties were no longer present: the improvement of the condition helped more than any drug could do before. (Cases No.3, 4 and 9)

### Theoretical Considerations

On the evidence of clinical observations, we came to the conclusion that animal fats, (including egg yolks, cream and butter) oils and other plant fats were followed by a recurrence of partly or entirely disappeared tumors; consequently the diet given has been made fatless.

To picture the functioning of the K-rich and Na-poor (saltless) diet, we have to consider the contrasting action of the K and Na groups in the body. In order to restore the diminished minerals of the K group to the tissues and on the other hand to eliminate the excess of the minerals of the Na group from the tissues, potassium rich food had to be given, and at the same time the elimination therapy had to be applied, supported by liver therapy.

#### Fatless Diet.

As emphasized above all fats of any kind must be excluded in so far as this is possible. Such a diet, although not absolutely fat free, we may, for all practical purposes, call fatless.

The fatless diet can be continued through many years, judging from long experience with other chronic diseases. Three complications were not infrequently encountered: diarrhea, a general hypersensitivity, and a difficulty in sleeping. In such cases, 2 to 4 capsules of vitamin A and D, as in concentrated cod-liver-oil, were helpful. It is, according to our experience, not necessary to fear fat-deficiency as described by Burr and Burr<sup>7</sup> and others.

In experiments on rabbits, testing the restoration of the liver, Mann<sup>8</sup> and his co-workers observed that the addition of fat during the restoration period damaged the liver more than did any other food substance. It is very interesting in this connection to consider the length of time in which the restoration of the

liver may occur. Mann's observations on both these questions, the addition of fat and the length of the restoration time, in the experiments with the liver, are in agreement with the present writer's clinical experiences in chronic diseases. This is Mann's statement:<sup>8</sup>

"If the administration of carbon tetrachloride is stopped-- in experimentally damaged livers-- progression of the lesion ceases and, during the course of several years, considerable repair of the hepatic tissue may occur.

"Animals with badly injured livers may be kept in excellent condition if they are kept on a high carbohydrate and low protein diet. A meat diet usually results fatally. The condition of the liver is also deleterious to the life of an animal that has--- experimental--cirrhosis."

Fundamental elimination process: This process we consider as having two essential parts, direct and indirect.

I. The direct part is the elimination of toxins due to secondary infections, intermediate metabolic poisons and necrotic tissue, which elimination effect we feel is due to the ingestion of substances such as fruit, vegetable juices, soups, etc., that contain minerals of the K-group<sup>9,10</sup> (intracellular), vitamins, enzymes and ferments. These are believed to stimulate:<sup>12a</sup>

- (a) The functioning of the liver, including bile production, storage and activation of enzymes and vitamins
- (b) intestinal excretion
- (c) renal function (diuresis)
- (d) higher oxidation power
- (e) skin, lung, and cell respiration
- (f) activity of the circulatory system, including phagocytosis and shifting the white blood picture to the left.<sup>13</sup>  
(c,d,e are stimulated in addition by Niacin. See p... )

II. The indirect part is concerned with excluding, any substances which inhibit elimination, namely:

- (a) Most drugs, such as morphine and sulfa-groups
- (b) the Na-group<sup>11</sup> (extracellular)
- (c) fats and most of the animal proteins
- (d) canned, preserved, or bottled foods

- (e) refined foods and certain spices and condiments
- (f) alcohol
- (g) nicotine

Very little is known of how the liver cells may transform some poisons into substances which can be neutralized or otherwise made harmless or excreted into bile capillaries, instead of being carried to other vital organs not equipped to deal with them.

For this purpose two processes may be mentioned: One is a process which combines poisons or a phenolic hydroxyl group with glycuronic acid, derived from carbohydrates. This process regulates, at the same time, the steroid-hormone metabolism by protecting it against an excess of sex-hormones. By the same means some carcinogenic substances of the steroid type could probably be disposed of.<sup>14</sup>

The other process is a hepatic detoxifying process-- such as the acetylation of poisons which contain p-amino benzoic acid or sulfanilamide. The acetyl group for this function is derived from carbohydrate, probably via pyruvate and acetyl phosphate, according to Soskin.<sup>14</sup> V. Euler<sup>22</sup> first observed that the pyruvic acid metabolism is altered in tumors.

If carbohydrates in the diet are not sufficiently supplied they must be manufactured by the body from other food substances or from its own material, in order to satisfy fuel requirements. There is usually available in the total body reserve not more than 370g of carbohydrates, as stated by Soskin.<sup>14</sup> This small amount can be rapidly exhausted--sometimes completely exhausted in about 13 hours--with an alarming decrease in glycogen content in the liver and muscles and a lowering of the blood sugar level-- as is found frequently in diabetes, hyper-thyroidism, tuberculosis,

cancer, and starvation from other causes. Consequently we feel that the high carbohydrate intake is one essential factor for the functioning of the elimination organs.

When the elimination is well under way, the body is prepared to initiate the functioning of its previously inhibited "healing apparatus".

Liver Therapy: When some amounts of liver extract are injected, they should theoretically bring some disorder into the regulated actions of hormones, oxidation enzymes and various metabolic processes by probably stopped one and over stimulating another. For instance liver extract prepared from female animal livers may stop male sex hormones<sup>13</sup> and vice versa. In this respect different male and female liver extracts could profitably be prepared and used. The before-mentioned enzymes and hormones are transformed and activated in nature and take place in the liver<sup>19</sup>; but according to the words of Schoenheimer "... every regenerative reaction involving an increase in free energy must be coupled with another process." The liver, as the "heart of the chemical circulation", absorbs most of the minerals, enzymes and hormones of the intracellular K-group and stores, activates and distributes them, according to need, keeping them in equilibrium and activity continuously.

The disturbances attributed by Astrachan<sup>20</sup> to the use of crude liver extract we have never encountered, even when giving larger doses and more frequently. At first the effect is almost always beneficial, but later some individual peculiarities have to be taken into account.



During the absorption process observed to occur in same tumor masses we noted in several cases that pains in some inflamed areas became excessively severe. Such pains apparently were considerably reduced following the addition of niacin, 50mg, 8 to 10 times a day or more; therefore the administration of liver extract could be continued. The influx of toxic substances into the general blood stream was seemingly lessened, as our observations agree with Sollmann's statement that "oral administration of nicotinic acid results in prompt and marked increase of its urinary excretion ... The amide is contained in the cozymase which plays an important role in fermentation, glycolysis, and respiration."<sup>21</sup>

Saltless Diet in Acute and Chronic Diseases if Insufficient,  
Made effective by Liver Injection

For treating acute and chronic diseases, a strictly saltless diet is fundamental. This calls for an explanation: the older school (Naunyn, Von Leyden, Gerhard, Van Norden) used NaCl or NaHCO<sub>3</sub> in many chronic diseases as stimulants or against acidity. The newer conservative school used NaCl against dehydration or deficiency, based upon "the fact that there is decreased Na, Cl and H<sub>2</sub>O in plasma, which has to be administered correspondingly to make up the deficiency." It is standard clinical practice to use isotonic and hypertonic saline infusion with or without glucose in 5% solution or more in various clinical conditions.

In this connection it seems necessary to mention the problem of acidosis. In cases of malignant neoplastic disease there is also a slow development toward acidosis, and from acidosis to coma. In general, Na, Cl are the prominent electrolytes of the body, and if these are too far diminished because of the invasion of Na, Cl, and H<sub>2</sub>O into the tissues, the conductivity of the serum and the exchange

between serum and tissue are lowered, so that the tissues, being taxed with an excess of Na, Cl and H<sub>2</sub>O, become edematous.

This pathologic condition brings about a loss of acidity in the stomach, urine and bile, and also in various tissues. At the same time, the plasma has an increase of K, P, Mg, cholesterol and glucose, while the tissues suffer a decrease of these substances. The underlying cause of the diminished defense of the tissues against Na is, according to the Prague school, the diminution of the electrical potentials, as shown by H. Kaunitz (Zt. F. Klin. Med. 1937-38, Bd. 135-137).

According to Fenn<sup>22</sup> the extra-cellular Na-group is part of the group which constitutes 30% of the body mass, whereas the intra-cellular K-group is part of the group which constitutes more-than-60% of the body mass. Therefore, when there is an increase of Na in the 60% intracellular group, it is a mistake to infer a deficiency of Na. On the contrary, there is an excess of Na in the body mass as a whole. The fact of the decreased Na in plasma taken by itself is misleading. In a living body, there is continuous exchange, that is, the biological groups react against each other, exchanging the Na-group against the K-group, as is shown by tests of the serum and red blood cells in a report by Gerson<sup>23</sup>. It is stated there, that in some chronic diseases the saltless diet did not bring about the re-exchange of Na against K between tissue and serum in a period of several weeks; but following the addition of liver injections this result was obtained.

For example: NaCl was found in the serum decreased to the extent of 234 mgm% after a saltless diet of several weeks. By

adding daily liver injections while continuing the saltless diet, in three days NaCl was increased to 556, in nine days to 585 mgm %. At the same time, Na was found to be diminished in the red blood cells.<sup>23</sup>

In our experience with patients suffering from malignant neoplastic disease, we have found the most efficient agent for

accomplishing this re-exchange of Na from the serum is great and frequent doses of crude liver extract and niacin.<sup>23</sup> However the tests in the article of Fenn, cited above, revealed that Na could have been returned to the serum from the tissue only, as the continuation of saltless diet excluded any other source. The consequence is that the acidosis in the serum is relative and secondary.

We must also consider that what is called acidosis is acidosis only in the minor part of the body-tissue (i.e., the 30% consisting of connective tissue, bile ducts, plasma, spinal fluid, lymph fluid, etc.) whereas there is at the same time a Na-excess in the major part of the body-tissue: liver, muscles, brain, kidneys, spleen, stomach, etc. which fact has been almost consistently overlooked. Thus it may be very dangerous for example to give additional NaCl or NaHCO<sub>3</sub> to a patient already suffering from sodium-excess in muscles, brain, nerves, glands, stomach. As a result of this tissue alkalosis, due to excess sodium in the tissues, it is impossible for the liver and stomach to function normally, as well as the pancreas, thyroid, salivary glands and bile, since the excess of sodium prevents the formation

of those acids which play a predominant part in maintaining the normal function of these organs. In addition, it must be recognized that, as a result of excess sodium in the tissues the electrical potentials in the tissues go down, tissue anoxia appears, cell respiration ceases and death occurs.

Contrasting Function of K- and Na-groups: The K-rich diet can prevent the excess of inflammation caused by stasis and edema as a consequence of the invasion of Na + Cl + H<sub>2</sub>O into the cells.<sup>24</sup> Following this conception, the K-rich diet<sup>25</sup> was made more and more Na-poor. The relation of K:Na (based upon Von Bunge's Kalium-Sodium Antagonism) in apples, oranges, lemons and other citrus fruits is in molecules 58:1, while in potatoes, it is 24:1<sup>25</sup>. These foods are also some of the fundamentals of the diet above described. The K-rich and Na-poor diet is followed by a healing hyperemia<sup>26</sup>, as proved by microscopical findings in lupus<sup>27</sup> chronic eczema<sup>28</sup> and as also seen on clinical observations in various chronic diseases, including the selected cases of malignant neoplastic disease presented.

A diet, rich in K and in minerals of the K-group<sup>26</sup> (intracellular) and poor in Na and minerals of the Na-group (extracellular) has theoretically the following functions:

a. The diet prevents the penetration of Na, Cl, H<sub>2</sub>O into the cells<sup>29</sup> and prevents the loss of K<sup>16</sup> which means the prevention of edema in damaged cells or an inflamed area.

b. In this way, the diet restores to the cell metabolism the minerals of the K-group, first in the more damaged cells of the inflamed area, then to the connective tissue in general, the visceral nervous system, and especially the liver, thus helping to bring back glycogen to the liver<sup>11</sup>, together with the K-group.

(See the above-mentioned restoration of the electrical potentials.)

c. One beginning effect of the diet is that it opens the arterial part of the capillary loop and decreases the venous part, thus producing a better arterial circulation. It changes in this way the former stasis into an influx of fresh arterial blood and causes a favorable hyperemia, as can be seen in microscopical pictures in lupus<sup>27</sup> and under the capillary microscope in various diseases.

d. The diet permits a highly efficient absorption and elimination, carrying various toxins and breakdown products of necrotic tissue to the organs of elimination. Evidence of this statement will be given in subsequent articles, by photographic and Histologic sections. "Healing Apparatus": The physician must never overlook the fact that there is originally a tremendous ability of the body to heal. Paralyzed in chronic and neoplastic disease, the healing apparatus can be activated even in malignant disease. We feel that the liver can be regarded as the central organ of this functional unit.

A normal body has a profound and well protected healing power; and one very important and effective part of it is the power to produce arterial hyperemia. This does not involve excessive inflammation, with great stasis, intensive cyanosis and voluminous edema - a condition which the physician must stop by all available means, as it adds to the destruction and prevents beneficial absorption. But a well regulated arterial hyperemia brings in additional fresh blood, capable of absorbing and carrying away dissolved detritus, damaged parts of cells, exudative products and other pathologic substances.<sup>16</sup> For this reason the dietary treatment here described, being rich in vitamins and in the minerals of the intracellular K-group can be considered primarily

### SUMMARY

It is interesting to note that in all of the cases described the patients when first seen had suffered recurrences or metastases after having received the recognized routine treatment of surgery and/or radium and X-Ray therapy, and that, following the above mentioned method of management, we observed clinically a rather striking temporary improvement. This improvement is continuing in two cases for over three years. (No. 2 and one other case) in two others (Nos. 4, 8) for 1½ years or more, in four cases (Nos. 3, 5, 6, 10) for one year or more, in three cases (Nos. 1, 7, 9) for six months or more.

### CONCLUSION

In view of the clinical observations made in malignant neoplastic disease during the use of the modified Gerson-Diet and liver therapy plus the seriousness of the disease and fact that this type of management can do no harm, it would seem that the malignant tumor patient might be routinely entitled to all the support that this method can give.

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