

TUMORS

There were 195 cases of tumors treated in the 12th General Hospital, of THE 85 were treated in Africa, 44 in Rome, and 66 in Leghorn.

TABLE I INCIDENCE OF TUMORS

AFRICA	85
ROME	44
LEGHORN	66
TOTAL	195

To simplify a brief discussion of these varied tumors, they have been classified according to the systems of the body which they affected rather than on a basis of the pathology which they represent. Table II gives such a classification in detail-----

TABLE II TUMORS TREATED IN THE 12th GENERAL HOSPITAL

<u>I Tumors of the skin and mucous membranes.</u>	
a. Sebaceous cyst	37
b. Epidermoid cyst	6
c. Mucous cyst	5
d. Hemangioma	7
e. Lymphangioma	1
f. Nevus	2
g. Fibroma	8
h. Melanoma	1
i. Epithelioma	4
j. Lipoma	11
<u>II Tumors of the lymphatic system.</u>	
a. Lymphosarcoma.	1
<u>III Tumors of the nervous system.</u>	
1. Brain.	
a. cerebral hemispheres	1
b. Mid-brain (glioblastoma)	1
c. Cerebellum	
Ependymoma	1
Medulloblastoma	2
Angioma (venous)	1
2. Peripheral nerves.	
d. Von Recklinhauser's Disease	1
e. Neuroma	13
<u>IV TUMORS OF BONE.</u>	
a. Osteochondroma	9
b. Enchondroma	2
c. Osteoma	9
d. Cyst	1
<u>V Tumors of Nose, Pharynx and Nasal Sinuses.</u>	
a. Polyp (nasal)	5
b. Polyp (antral)	6
c. Fibroma of uvula	1
d. Fibroma of nose	1
<u>VI Tumors of Jaw.</u>	
a. Radicular cyst	6
<u>VII Tumors of Salivary Glands.</u>	
a. Parotid - Fixed Tumor	2

Table II Con't

TUMORS

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VIII	<u>Tumors of the Neck.</u>	
	a. Thyroglossal Cyst	2
	b. Branchiogenic Cyst	3
	c. Malignant Tumors (undiagnosed)	2
IX	<u>Tumors of the Thyroid Gland.</u>	
	a. Colloid goiter	1
	b. Aderoma	4
X	<u>Tumors of the Larynx.</u>	
	a. Myxofibroma of vocal cord	2
	b. Fibroma of vocal cord	3
	c. Angioma of vocal cord	1
XI	<u>Tumors of the Breast (Male)</u>	
	a. Fibroma	1
	b. Fibroadenoma	4
	c. Lipoma	1
	d. Periductal Keloid	1
XII	<u>Tumors of Stomach and Intestines.</u>	
	a. Carcinoma of stomach	2
	b. Carcinoma of cecum	1
	c. Pseudomyxoma of cecum	1
XIII	<u>Tumors of Rectum and Anus.</u>	
	a. Rectal polyp	1
	b. Papilloma of Anus	1
XIV	<u>Tumors of Genito-urinary system.</u>	
	a. Hypernephroma of kidney	1
	b. Cyst of kidney	1
	c. Cyst of bladder	1
	d. Papilloma of urethra	2
	e. Fibroma of testis	1
	f. Teratoma of testis	4
	g. Fibroma of epididymis	1
	h. Cyst of epididymis	1
	i. Lipoma of spermatic cord	2
	j. Periprostatic tumor (undiagnosed)	1
	k. Carcinoma of penis	1
XV	<u>Tumors of Ovary.</u>	
	a. Cyst of ovary	3

I Tumors of the Skin and Mucous Membranes.

There were 82 tumors affecting the skin and mucous membranes treated in the 12th General Hospital.

The majority of these tumors were benign tumors consisting chiefly of sebaceous cysts, epidermoid cysts, mucous cysts, nevi, fibromata, lipomata and melanoma. These tumors were widely excised and the operations followed by prompt healing of the wound.

Of the total 82 tumors of skin and mucous membranes, 11 cases were not operated upon.

6 of these cases were angiomas which were sent to the zone of the interior.

One case was sent on account of recurrence of the tumor after a previous operation.

Two cases were sent on account of rapid growth and extension under observation.

3 cases were sent on account of complication diseases, wounds or injury which incapacitated them from further overseas duty.

One epithelioma and one papilloma of the mouth were transferred to the zone of the interior without operation on account of recurrence of the tumor.

Three other simple benign tumors in the group were not removed surgically because the patients were being transferred to the zone of the interior on account of complicating wounds, injury or disease. The tumors could well afford to await excision until after transfer.

II Tumors of the Lymphatic System.



One patient who sought relief of swelling of the neck, was operated upon and a biopsy was done on the enlarged post-auricular gland removed. The patient was found to have lymphosarcoma and he was promptly transferred to the zone of the interior for further treatment.

### III Tumors of the Nervous System.

There were 20 tumors of the brain and the peripheral nerves.

Of the six tumors of the brain one was cerebral, one involved the mid-brain, and four were cerebellar tumors.

The patient suffering from the tumor of the left cerebral hemisphere was transferred to the zone of the interior without operation; therefore the exact histological nature of tumor is unknown.

The patient suffering from the tumor of the mid-brain was the only patient in the whole series of tumors who died while under treatment in the 12th General Hospital. On admission to the hospital he was found to have symptoms of a subtentorial tumor. After being studied, he was subjected to a suboccipital craniotomy and was found to have a glioblastoma multiforme of the mid-brain with subarachnoid metastasis and internal hydrocephalus. Death was inevitable and swift.

The four cases of cerebellar tumor were operated upon. Suboccipital craniotomy revealed an ependymoma in one case, medulloblastoma in two cases, and a widespread venous angioma in the fourth case. All four of these malignant tumors were non-resectable. After the patients had recovered from their operations, they were transferred to the zone of the interior for further treatment.

Of the 14 cases involving the peripheral nerves one case was that of multiple neurofibromatosis (Von Recklinghausen's Disease) proven by biopsy. The patient was not inconvenienced by the presence of the multiple tumors and was returned to A duty.

The 13 remaining cases of tumor of the peripheral nerves were neuromas, the result of trauma received from accidental injury or battle wounds. After resection of the tumors the disabling symptoms were relieved, and the patients returned to duty except in two cases. One of these cases was complicated by a psychoneurosis and the other was a case of recurrence which involved the sole of the foot. Both cases were transferred to the zone of the interior.

### IV Tumors of Bone.

There were 21 tumors in this series involving the bones.

9 of these were cases of osteochondroma. 2 of these cases, one involving the astragalus and the other the 4th and 5th lumbar vertebrae were not operated upon.

Of the remaining seven cases of osteochondroma, 4 cases were returned to A duty, and 3 were assigned to permanent limited duty on account of a permanent weakness of the hand or leg involved.

Two cases of enchondroma occurring in the phalanges were excised and the patients were returned to A duty.

Of the nine (9) cases of osteoma, four (4) were excised and the patients returned to A duty. Five (5) cases were recurrences and as there was a question of their being malignant they were transferred to the zone of the interior for further treatment.

The one (1) case of bone cyst occurring in the left tibia was curetted and found to be a mesenchymatous cyst. The patient was transferred to the zone of the interior.

### V Tumors of the Nose, Pharynx, and Accessory Sinuses.

There were thirteen (13) cases in this group.

Of five (5) cases of nasal polyps, four (4) were operated upon and returned to A duty. The fifth case was bilateral and accompanied by allergic rhinitis and was sent to the zone of the interior.

There were six (6) cases of polyps of the antrum which were operated upon, five (5) of these were returned to A duty and the sixth case was sent to the zone of the interior on account of complicating recurrent fistula.

One case of fibroma of the uvula was operated upon and returned to A duty.

One case of fibroma of the floor of the nose recurred after excision and was sent to the zone of interior for further treatment.

### VI Tumors of the Jaw.

There were six (6) cases of radicular cysts which were excised and returned to A duty.

### VII Tumors of the Salivary Glands.

Two mixed tumors of the parotid gland were excised. One was olive-sized and completely encapsulated; the patient having this tumor was returned to A Duty. The other patient had a recurrent tumor excised thirteen months after the primary operation. On account of recurrence of the tumor the patient was sent to the zone of the interior where he could be observed for further trouble and treated accordingly.



#### VIII Tumors of the Neck.

There were seven (7) cases of tumor in the region of the neck in this series.

Two (2) cases of the thyroglossal cyst and three (3) cases of branchiogenic cyst were operated upon and after recovery were returned to A duty.

Two (2) other cases of rapidly growing tumors of the neck entered the hospital and were evacuated by air to the zone of the interior. The exact nature of the tumors were not diagnosed before they were evacuated. In a period of less than two (2) months they grew rapidly and were undoubtedly malignant tumors.

#### IX Tumors of the Thyroid Gland.

Five (5) tumors of the thyroid gland were encountered.

one was a case of colloid goiter and the other four (4) were cases of adenoma of the thyroid gland. After excision of the tumors all five (5) cases were returned to A duty.

#### X Tumors of the Larynx.

There were six (6) tumors involving the larynx.

Two (2) cases of myxofibroma of the vocal cords were returned to A duty after excision of the tumor.

Two (2) of the three (3) cases of fibroma of the vocal cord were encountered in Africa in the early days of the life of the 12th General Hospital and proper instruments for removal of the tumors were not at hand; consequently these cases had to be returned to America for operation. The other case was operated upon and later returned to A duty.

One (1) case of angioma of the vocal cord was excised and the patient was returned to A duty.

#### XI Tumors of the Breast.

Seven (7) cases of tumors of the male breast occurred in this series of tumors. One tumor was a fibroma, four (4) were fibroadenoma, one (1) was a lipoma and one (1) a periductal keloid. All the tumors were excised and after recovery the patients were returned to duty.

#### XII Tumors of the Stomach and Intestines.

Four (4) cases of tumors of the stomach and intestines were treated at the 12th General Hospital.

Two (2) of these cases were carcinoma of the stomach. One (1) case was found at operation to be extensive and a subtotal gastrectomy was performed. The patient was sent to the zone of the interior after recovery from the operation. The other case was found by X-ray to be an extensive carcinoma of the pyloric region of the stomach. The patient was returned to the zone of the interior for operation and treatment on account of the advanced state of the condition.

The case of tumor of the cecum was explored at operation and found to be an advanced carcinoma. The patient was sent to the zone of the interior for further treatment after recovery from operation.

The case of pseudomyxoma of the cecum was found at operation and was returned to zone of interior for further treatment.

#### XIII Tumors of Rectum and Anus.

A case of rectal polyp was treated at the 12th General Hospital. The polyp was excised and after post-operative recovery the patient was sent to the zone of the interior for observation and treatment.

A papilloma of the anus was removed and after recovery patient was returned to A duty.

#### XIV Tumors of the Genito-urinary System.

In this group there were sixteen (16) cases of tumors.

Five (5) of these involved the urinary system.

One (1) case of hypernephroma of the kidney was subjected to nephrectomy and after recovery the patient was sent to the zone of the interior.

One (1) case of cyst of the kidney was treated by excision of the cyst. The patient, after operation, was returned to B duty on account of a complication of asthma and hay fever.

A case of a cyst of the urinary bladder was treated by excision of the cyst and, after operative recovery, was returned to A duty.

Two cases of papilloma of the urethra were treated by excision of the tumors and returned to A duty after post operative recovery.

There were eleven (11) cases of tumors which involved the genital system.

In one (1) case of fibroma of the testis, the tumor was excised and the patient returned to A duty after recovery.

Four (4) cases of teratoma of the testis were subjected to orchidectomy and after recovery were sent to the zone of the interior for observation and treatment.

In one case of cyst of the epididymis, the cyst was removed. After operative recovery the patient was returned to temporary limited duty, for in addition to the tumor he was suffering from battle wounds.

A case of fibroma of the epididymis was treated by excision of the tumor.



XIV Tumors of the Genito-urinary system con't

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After recovery from operation the patient had to be sent to the zone of the interior on account of the complication of psychoneurosis.

Two (2) lipoma of the spermatic cord were excised and after recovery from operation were returned to A duty.

One (1) case of rapidly growing peri-prostatic tumor was encountered and the patient was returned to the zone of the interior for treatment of the malignant tumor.

One case of carcinoma of the penis entered the hospital for treatment. No operation was attempted in this theater, the patient being sent to the zone of the exterior for treatment.

XV Tumors of the Ovary.

Three (3) cases of ovarian cyst occurred in the female patient treated at the 12th General Hospital. One of these cases in which the pedicle of the cyst was twisted, symptoms of an acute abdomen demanded emergency operation. All three of the cases were operated upon and the cyst removed. The patient eventually returned to A duty.

SUMMARY OF TUMORS TREATED AT THE 12TH GENERAL HOSPITAL

195 cases of tumors were treated at the 12th General Hospital.

164 cases of the series were operated upon.

144 of these were returned to A duty after operation.

15 cases were returned to the zone of the interior on account of malignancy or suspected future recurrence.

One case resulted in death, a case of inoperable malignant tumor of the midbrain with metastasis.

Four (4) cases were returned to B duty, on account of a residual weakness in an extremity which prevented the patient from carrying out full duty.

Of the total 195 cases:

144 or 74 o/o were returned to duty.

4 or 2 o/o were returned to B duty.

46 or 23.5 o/o were sent to zone of interior.

1 or 0.5 o/o died in hospital.