SEX AND TUMOUR FORMATION:

AN ANALYSIS OF 10,100 CASES.¹

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I AM not aware of the existence of any comprehensive statistics of tumours embracing a sufficiently large number of cases to be perfectly reliable. I undertook the present investigation, hoping by so much to make good this

deficiency. I propose to limit my remarks to the subject of sex and tumour formation, reserving the subject of age and tumour formation for subsequent consideration. For this purpose I have made an analysis of all the primary tumours—10,100 in number—under treatment at four large metropolitan hospitals during the following years: Middlesex Hospital (seventeen years, 1883), 67; St. Bartholomew's (ten years, 1882), 73; St. Thomas's (nine years, 1882), 74; University College (eleven years, 1881), 71. Thus:—

TABLE I.

Carcinoma.		Epithelioma.		Rodent ulcer.		Sarcoma.		Myxoma.		Keloid.		Fibroma.		Adenoma.		Lipoma.		Osteoma.		Enchondroma.		Papilloma.		Cystomata.								Uterine fibroids.		All others.		Total.		Grand total.
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Con- genital.	Seba- ceous.		Simple.		Ovarian.		M	F	M	F	M	F	—	
587	3166	1289	418	50	46	439	388	20	18	10	9	65	132	30	266	109	258	76	88	28	27	47	57	26	25	131	117	51	35	—	530	—	604	347	484	3325	6775	10,100
16	84	76	24	52	48	53	47	53	47	53	47	33	67	10	90	30	70	47	53	51	49	45	55	51	49	53	47	37	63	—	—	—	—	42	58	33	67	100

Approximate percentage.

Appendix to Table I.

(a) In using the terms *carcinoma* and *epithelioma* I have followed the classification adopted by the registrars of the hospitals whose reports I have employed. But in this respect they are not perfectly unanimous. In the Middlesex and University College reports, for instance, all the uterine cancers are classed as carcinomas, but in the St. Thomas's and St. Bartholomew's reports they are divided between these and the epitheliomas, only a small number being included in the latter group, however. Minor divergencies of a similar nature are noticeable in the classing of some of the other local cancers.

(b) Eighty-six per cent. of the *adenomas* were of the female breast; of those situated elsewhere the majority were in the salivary glands, the male liability to these being more than double that of the female.

(c) Of the *enchondromas*, thirty-seven were connected with the bones, chiefly of hand and femur—twenty males and seventeen females. Eighteen were connected with the salivary glands, seventeen with the parotid, and one with the submaxillary—eight males and ten females.

TABLE II.

Showing Locality and Relative Frequency.

Cancer.	Total (47 years).		Grand total (both sexes).
	Male.	Female.	
Breast	13	1310	1323
Uterus	—	1160	1160
Tongue	384	64	448
Rectum	130	127	257
Skin of face, head, and neck, including rodent ulcers (a) ..	161	89	250
External genitals (b)	126	102	228
Lip	221	2	223
Stomach	127	80	207
Liver	80	75	155
Skin of trunk and limbs (c) ..	96	40	136
Oesophagus	93	23	116
Mouth	78	11	89
Glands	31	24	55
Intestines (d)	23	26	49
Bladder	26	10	36
Upper jaw	21	15	36
Peritoneum	13	18	31
Testis	24	—	24
Anus	14	7	21
Ovary	—	20	20
Kidney	13	7	20
Larynx	19	1	20
Bones (other than jaws)	7	7	14
Pelvis	1	9	10
Lung	7	3	10
Tonsil	6	3	9
Mediastinum	6	3	9
Pharynx	4	4	8
Pancreas	4	2	6
Prostate	5	—	5
Lower jaw	4	1	5
Perineum	1	2	3
Bile-duct	1	2	3
Gall-bladder	1	1	2
Pericardium	1	1	2
Parotid	2	—	2
Pleura	—	2	2
Dura mater	—	1	1
Lachrymal sac	—	1	1
Abdominal wall (not skin) ..	1	—	1
Symphysis pubis	—	1	1
Urethra	1	—	1
Thyroid	—	1	1
Eye-ball	—	1	1
Spleen	1	—	1
Coccygeal gland	1	—	1
Unclassified	178	375	553
Total	1926	3630	5556

Appendix to Table II.

(a) The seats of the disease were as follows (omitting rodent ulcer):—

Seat.						Male.	Female.	Total.
Cheek	..	..	..	..	..	39	18	57
Neck	..	..	..	..	..	11	9	20
Eyelids	..	..	..	..	..	12	6	18
Nose	..	..	..	..	..	11	5	16
Scalp	..	..	..	..	..	8	1	9
External ear	..	..	..	..	..	3	2	5
Orbit	..	..	..	..	..	3	—	3
Forehead	..	..	..	..	..	1	1	2
Chin	..	..	..	..	..	1	—	1
Unclassified	..	..	..	..	..	22	1	23
Total	..	..	..	..	..	111	43	154

(b) Penis 70, scrotum 56, vulva 65, vagina 28, clitoris 6, nymphæ 3.

(c)	Seat.					Male.	Female.	Total.
Leg	..	..	..	..	..	14	3	17
Foot	..	..	..	..	..	8	7	15
Thigh	..	..	..	..	..	6	8	14
Hand	..	..	..	..	..	12	1	13
Groin	..	..	..	..	..	4	3	7
Back	..	..	..	..	..	3	3	6
Chest	..	..	..	..	..	3	3	6
Hip	..	..	..	..	..	2	—	2
Abdomen	..	..	..	..	..	1	1	2
Axilla	..	..	..	..	..	2	—	2
Arm	..	..	..	..	..	2	—	2
Forearm	..	..	..	..	..	1	—	1
Unclassified	..	..	..	..	..	38	11	49
Total	..	..	..	..	..	96	40	136

(d) Colon: males 8, females 6 = 14. Sigmoid: males 9, females 4 = 13. Duodenum: male 1, females 3 = 4. Ileum: female 1. Ileo-cæcal valve: male 1.

¹ Abstract of a paper read before the London & Middlesex Medical Society, February, 1884

TABLE III.
Showing Locality and Relative Frequency.

Sarcoma.	Total.		Grand total (both sexes).
	Male.	Female.	
Bones	138	117	255
Connective tissue &c.	113	97	210
Other parts	70	93	163
Unclassified	118	81	199
Total	439	388	827

Appendix to Table III.
SPECIAL SARCOMAS.

Bones.			
—	Male.	Female.	Total.
Face (nearly all of the jaws—chiefly the upper)	54	50	104
Femur	19	19	38
Humerus	8	3	11
Scapula	6	3	9
Fibula	6	3	9
Tibia	5	3	8
Innominate	3	4	7
Skull	4	3	7
Ribs	3	1	4
Foot	2	1	3
Radius	—	3	3
Ulna	1	1	2
Clavicle	1	1	2
Hand	—	2	2
Coccyx	—	2	2
Sternum	—	1	1
Total	112	100	212

Connective Tissue &c.			
—	Male.	Female.	Total.
Face	8	7	15
Neck	9	6	15
Thigh	4	8	12
Orbit	7	2	9
Palate	3	5	8
Groin	7	1	8
Leg	3	4	7
Scalp	4	2	6
Arm	4	1	5
Popliteal space	2	2	4
Mediastinum	2	2	4
Abdominal wall	2	2	4
Upper lip	1	2	3
Forearm	—	3	3
Shoulder	2	1	3
Foot	1	—	1
Axilla	—	1	1
Thumb	1	—	1
Buttock	1	—	1
Ischio-rectal fossa	—	1	1
Total	61	50	111

Other Parts.			
—	Male.	Female.	Total.
Breast	2	54	56
Testicle	18	—	18
Choroid	9	5	14
Parotid	5	8	13
Retina (glioma)	7	4	11
Skin	4	7	11
Multiple	2	3	5
Rectum	4	1	5
Kidney	2	2	4
Lymphatic glands	2	1	3
Bladder	2	1	3
Muscle	2	—	2
Prostate	2	—	2
External ear	1	—	1
Optic nerve	—	1	1
Vulva	—	1	1
Submaxillary gland	1	—	1
Uterus	—	1	1
Vagina	—	1	1
Nose	1	—	1
Colon	1	—	1
Mesentery	1	—	1
Tonsil	1	—	1
Thyroid	—	1	1
Pharynx	—	1	1
Total	67	92	159

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

CASES OF UNUNITED FRACTURE.

(Under the care of Mr. G. R. TURNER.)

CASE 1. *Ununited Fracture of Tibia and Fibula of four years' standing, treated by Dieffenbach's Operation.*—B. W—, aged fifty-two, a carman, was admitted on October 9th, 1882. Nearly four years previously (on December 12th, 1878) he sustained an oblique fracture of the middle third of the left tibia and upper third of the left fibula from the passage of a cart wheel over the leg. He was admitted into the hospital under the care of Mr. Davies Colley, who has kindly supplied the following details:—"The fracture was very oblique. There was very little ecchymosis and only slight swelling. The house-surgeon does not mention the treatment, but no doubt it consisted of the application of a back splint with a foot piece and two side splints. Jan. 30th (house-surgeon's report): Leg taken down, good union, and in good position; to be put up in a Bavarian splint.—Feb. 3rd. Very good position, very little movement at the seat of fracture (not by myself). The letter does not say when he was discharged." The patient says that he was discharged with the leg in a plaster-of-Paris splint, and was told the bones were still ununited. It seems that he removed the splint and went to work. The fragments soon came to overlap, and he was unable to get about without a crutch. He does not appear to have had any further treatment, or to have reported himself at the hospital. The day before his second admission, nearly four years after the original accident, he fell down and bruised himself. The old fracture of the left leg was found to be ununited. There was no evidence of any recent injury to it. He was unable to lift the foot without support, or to walk except with the aid of a crutch. The patient looked healthy though pale. His urine was acid, and had a specific gravity of 1014; there was no albumen, sugar, or excess of phosphates in it.—Oct. 17th: Ether was administered, and a semilunar incision over the seat of fracture made down to the periosteum. The fragments were found overlapping and united by fibrous tissue. The lower end of the upper fragment of the tibia was set obliquely in front of the upper end of the lower fragment. The fibular fragments were similarly disposed at a higher level. Both upper and lower fragments of the tibia were drilled in two places and ivory pegs inserted. The pegs were driven into, not through, the fragments, and cut off level with the bone. During this proceeding the drill was accidentally thrust through the uniting fibrous medium. It was at once removed and inserted into the bone. The edges of the wound were united over the pegs, and the part covered with a carbolic gauze dressing. The fibular fragments were left untouched. The man suffered a good deal of pain the same evening, but otherwise did well. The wound ran an aseptic course and healed by first intention. A fortnight after the operation the skin became red over the upper end of the tibia, and a small abscess formed in this situation. Some healthy pus was evacuated from this, but a sinus has remained ever since. It has not been found to lead down to bone or to any of the pegs. A month after the operation the patient could lift the foot off the splint without assistance, and the limb was put up in a silicate of potash splint. He was discharged on Dec. 7th, 1882. When last seen, June 15th, 1883, he could walk well without a stick; there was much less wasting of the leg, which was daily getting stronger. The union of the fracture seemed good, though the patient was conscious of some very little movement between the fragments when the whole weight of the body was thrown on that side.

CASE 2. *Ununited Fracture of the Tibia and Fibula treated by Dieffenbach's Operation.*—A. H—, aged twenty-six, a sailor, broke his right leg on Nov. 13th, 1881, in the Brazils. The leg was allowed to rest in a cradle, and remained thus for six weeks. No splints at all were used.