A CASE
OF
GENERAL TELEANGIECTASIS,
MOST DEVELOPED IN THE LEFT HALF OF THE BODY,
ASSOCIATED WITH
ABNORMALITIES OF THE LARGE BLOOD-VESSELS
OF THE LEFT LOWER LIMB AND IN
THE NECK.

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THIS case is so remarkable for the great extent of the nævoid disorder, and for the unexpected abnormalities in some of the largest blood-vessels found at the inspection of the body, that I venture to hope it may not be unworthy of the notice of this Society.

In 1866, when I was assistant-surgeon to the Middlesex Hospital, E. L—, a puny infant, only a few weeks old, was brought to the out-patient room with intertrigo in the groins and in the crease between the thighs and vulva. A few small nævoid specks caught my attention; the mother seemed hardly to have remarked their presence. Under simple treatment the intertrigo disappeared,

and the child passed from my notice until December, 1870, four and a half years later, when her mother brought her on account of painfulness of the left leg. This leg and thigh were swollen and—as also the left half of the trunk, the left side of the head, and left arm—were mottled with dull red nævoid spots, mostly of the flat kind, popularly known as port-wine stains.

Over the chest, arm, thigh, and leg, they were small and scattered, but on the foot and on the face the spots ran together in larger blotches. The intervals of clear skin between the spots and blotches were traversed by dilated veinlets. In the left groin and upon the mons the nævoid tissue formed a prominent purplish spongy mass, the coarsely granulated surface of which was covered by an extremely thin epidermis. In the neighbourhood of this the greatest distension of the cutaneous veinlets was observed. Scattered over the right side of the body were a few small and inconspicuous nævoid marks, similar to those on the left half. In all its dimensions the left lower limb was considerably larger than the right. The child was fractious, she evidently suffered. The mother said that in cold weather she became blue and suffered more, the left leg becoming very painful. She was passionate and less intelligent than most children of her age, and not always cleanly.

Observing the excessive vascularity of the left lower limb I concluded, hastily as it proved, that it must be warmer than the right, and tested with the hand this really appeared so to myself and also to my class, but a careful thermometric examination proved the opposite:

	Temp. ham.	Temp. groin.	Temp. groin.*
Left	95·8° F.	96·7° F.	99·3° F.
Right	96·9°	97·7°	101·4°.

* A second observation during a feverish attack. Kew certificated thermometers were used. They were placed in contact with the skin, covered with a layer of cotton wool, and retained during several minutes with a bandage.

She left the hospital towards the end of the month, and was readmitted on 3rd January following (1871), having the day before lost blood to a large extent, the mother thought, from the bowel. A similar loss had happened, she said, before this. The anus and rectum were carefully examined, with a negative result; no piles, nor polypus, or diffuse excessive vascularity, was found here. This and the absence of other evidence of bowel disorder led me to think that the mother might have been mistaken as to the source of the bleeding.

In the summer (1870) she had a large loss of blood, the mother thought, from the vulva, and early in December following a very copious hæmorrhage happened in the night; the blood wetted her nightdress as high as the collar, and ran through the mattress. Two days after this I readmitted her into Queen Ward. No undue vascularity of the vulva or vagina was then apparent. The mass of nævoid tissue upon the mons was larger and more spongy, and minute scabs of dried blood were noticed upon some of the little projections which the bunches of its distended vessels formed upon its surface.

18th December.—A fresh hæmorrhage occurred. It was quickly stopped by ice. The house-surgeon clearly traced this to rupture of small bunches of this large spongy mass. The blood trickling down between the child's thighs might easily, when it had ceased to flow, have been thought to have proceeded from the vulva. The general nævoid condition of the surface had made great advance, still decidedly preponderating in the left half of the body, and the cutaneous veinlets in the spaces between the nævoid patches were more numerous and also more distended. Upon the belly and also on the back were several veins of the size of a quill. The disproportional enlargement of the left lower extremity was greater. The nævoid blotches had become almost confluent upon the entire surface of the thigh and leg. The limb was cold, and the nails very blue. A curved ulcer, one inch wide, encircled two thirds of the girth of the leg. The

child was in much pain, very fretful, and feverish; and in this and several subsequent feverish attacks she had obstinate and frequent retching. The hæmorrhage on this occasion (18th December) did not amount to more than a few drachms. It was quickly stopped with ice. The ulcer healed slowly.

On February 5th, when she went home, the following measurements were taken :

	From ant.-sup. sp. ilii to malleol. int. Inches.	From same point to patella. Inches.	Girth of thigh. Inches.
Right	16 $\frac{4}{8}$	9 $\frac{5}{8}$	10 $\frac{1}{2}$.
Left	17 $\frac{2}{8}$	about 1 more	11 $\frac{5}{8}$.

On 15th April (1871), it was noted that the nævoid mass on the mons had overspread the cutaneous surface of the left labium majus, and the general nævoid condition of the whole surface of the body had made great progress. The internal mammary and epigastric veins and their tributaries were very conspicuous.

In May the mother reported another hæmorrhage, as she thought, from the genitals.

October 7th, 1872.—She was readmitted with glandular abscesses in both groins. One had already burst, the other was opened with potassa fusa. They closed very slowly.

25th August, 1874.—She was admitted with erysipelas of the left lower limb, and several small superficial ulcers in the thigh and leg. She was discharged convalescent 18th September. Comparative measurements of the lower limbs showed :

	Ant.-sup. sp. ilii to malleol. ext.	Girth of thigh.	Girth of knee.	Girth of calf.	Length of foot.
Left	22 $\frac{3}{4}$	11	8 $\frac{3}{4}$	8 $\frac{1}{4}$	6 $\frac{3}{8}$.
Right	20 $\frac{1}{2}$	9 $\frac{1}{2}$	7 $\frac{3}{4}$	6 $\frac{1}{4}$	5 $\frac{7}{8}$.

9th August, 1875.—She was readmitted with intense vascular engorgement of the left limb; the thigh and leg were both intensely purplish red; they were dappled with

dots and arborescent brushes of capillary hæmorrhage, and extremely swollen, and very painful. Considerable fever and troublesome retching attended this inflammatory attack. Three days later several of the infarcted patches of the skin were gangrenous. The eschars were very slowly thrown off. The sores had little aptitude for healing, and they frequently became filmed with thin grey pellicular sloughs.

By the beginning of October their condition had much improved, but on the 10th of this month a fresh erysipeloid attack undid the repair and greatly weakened her.

By the 28th the erysipelas had passed off, leaving the ulcers pale and indisposed to cicatrise.

4th November.—Erysipelas again attacked the limb, which became extremely swollen, intensely congested, and blebbed. As in the former attacks she retched frequently. Her temperature ranged between 102° and 104° F. Screaming delirium soon set in, and death took place about twenty-four hours from the beginning of the attack.

The post-mortem inspection of the body, obtained with difficulty, was in many respects less perfect than could be desired. Dr. Sidney Coupland, who made it, found that the abdominal aorta underwent a more than usual diminution below the detachment of its coeliac and sup. mesenteric branches. The arteria carotis sinistra and art. iliaca comm., ext. and int. sinistra, were slightly smaller than the corresponding vessels of the right side. The vena iliaca dextra was of normal size, but the left common iliac vein was not larger than the venule accompanying the middle sacral artery, and the external iliac and the femoral vein were replaced by a plexus of veinlets, which with others corresponding to the branches of the art. iliaca int. formed a rete mirabile intercalated between the cava infr., ven. iliac. comm. sinistra above, and the pelvis and lower limb below. The left internal jugular vein was less than half the size of the right. A chain of swollen lymphatic glands accompanied the aorta and

iliac arteries, especially on the left side, where they reached along the femoral artery into the thigh. The bulk of this limb was immensely increased, as will be seen from the subjoined measurements.

	Girth at top of thigh.	Girth at upper border of patella.	Length from ant. sup. iliac sp. to int. condyle of femur.	From int. fem. condyle to base of 1st metatarsal.
	Inches.	Inches.	Inches.	Inches.
Left	16½	10¾	11½	12½.
Right	10¾	7	10½	11¾.

Cuts into the swollen limb showed it to be very cedematous, and that the nævoid tissue was principally restricted to the skin and subcutaneous tissues, not invading the muscles. The microscope revealed a cavernous arrangement of the vessels, and an abundant cell-proliferation in and thickening of the connective tissues.

Although I have called this a case of teleangiectasis, I would not wish it supposed that I consider the excessive vascularity as due solely or principally to inordinate dilatation of pre-existing vessels. I have no doubt that there was a considerable evolution of new vascular tissue.

One of the most striking features in the progress of the case was the gradual spread of the vascular disorder over the whole surface from a few specks in the left groin at birth. Its preponderance on the left side, maintained throughout, seems out of harmony with the small size of the vascular trunks. (Whether the rete mirabile replacing the femoral and external iliac vein was an error of development, or whether it was an acquired condition depending on obliteration of existing normal vessels, I shall not discuss.) That such an extreme disparity might conduce to engorgement of the peripheral vessels will be manifest from the consideration that the inordinate development of peripheral vessels would be attended with a corresponding disproportioned increase of their collective sectional area over that of the feeding artery. This,

in turn, would give rise to slowing or weakening of the blood-current, and so favour the accumulation of blood in the capillaries and veinlets, which would be increased by the hindrance to the effluent current offered by the disproportionate narrowness of the common iliac vein. Such sluggishness of current and ponding back of blood would favour its stagnation and clotting, and also promote the retention and accumulation of effete matters in the limb.

In these ways it might occasion plugging of vessels, accompanied by collateral flexions and oedema, and death of the obstructed vascular territory—the sloughs and ulcers probably were due to this—and it might also induce the repeated attacks of erysipelas, each accession occurring when a certain quantity of effete deleterious material had accumulated. The overgrowth of the bones and other connective tissues of the limb is simply an instance on a large scale of the hypertrophy which is daily seen within smaller limits wherever overfeeding is induced by an increased afflux of blood from any cause, as the presence of a sequestrum, &c.