

**Papilliform lesions (lymphangiomata) of the scrotum : associated with multiple petechial spots on the trunk and limbs : being a paper read in the Section of Dermatology at the Annual Meeting of the British Medical Association, Liverpool, 1912 / by Frank Cole Madden.**

**Contributors**

Madden, Frank Cole, 1873-1929.  
Royal College of Surgeons of England

**Publication/Creation**

[London] : [publisher not identified], 1912.

**Persistent URL**

<https://wellcomecollection.org/works/qker58gz>

**Provider**

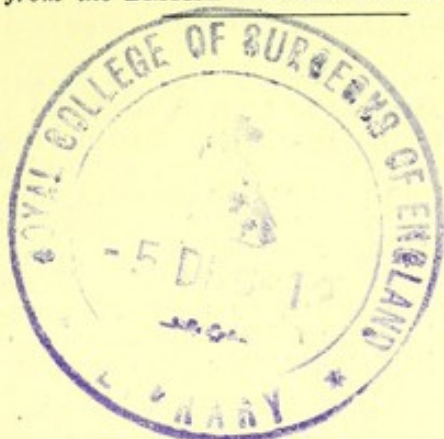
Royal College of Surgeons

**License and attribution**

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



21

**PAPILLIFORM LESIONS (LYMPHANGIOMATA)  
OF THE SCROTUM,**

*ASSOCIATED WITH MULTIPLE PETECHIAL SPOTS  
ON THE TRUNK AND LIMBS.*

*Being a Paper read in the Section of Dermatology  
at the Annual Meeting of the British Medical Association,  
Liverpool, 1912.*

By FRANK COLE MADDEN, M.D.Melb., F.R.C.S.Eng.,  
Professor of Surgery, Egyptian Government School of Medicine;  
Senior Surgeon Kasr-el-Ainy Hospital, Cairo.

THE subject of this peculiar condition was a young Egyptian fellah, Mohamed Amin, aged 23 years, from Minet-el-Gamh, Lower Egypt. He presented an extraordinary appearance, quite new to my experience, which I will endeavour to describe.

*Clinical Appearances.*

The whole skin of the scrotum was thickly studded with small, succulent, pedunculated elevations, like thick-walled vesicles, purple or mulberry in colour, which were sprouting from the skin of the scrotum, the root of the penis, and the perineum as far back as the anterior margin of the anus. The elevations varied in size from a pin's head to a pea, and presented all shades of colour from that of a morella cherry to a black grape. None of the skin of the scrotum was visible, but it appeared to be normal around the bases of the elevations, on separating them from each other with the finger. The root of the penis was sown with similar excrescences and a few were present on the body of the organ, but not on the glans. The perineum was in a similar condition, but more sparsely covered (Fig. 1). On cutting into the vesicles, which were quite painless and insensitiye, a dark haematin-stained fluid was discharged, but no fresh blood.

Both thighs as far as the knees were covered with tiny dark purple spots, like subcuticular petechiae, and here and there raised papules of the same colour as the vesicles on the scrotum, which only rarely formed pedunculated elevations. The skin of the back, especially in its lower part and over the gluteal region, was more densely covered with these pigmented points, and a similar condition existed on the abdomen, and extended up as far as the costal margins (Fig. 2). There was an especially dark massing of these spots at the umbilicus, and a few scattered points also occurred on the inner sides of the elbows. These manifestations were apparently simple petechiae in the skin and

under it, with dark haematin staining. The skin generally was dry and rough, and the glands in both axillae and groins were enlarged.

There was no fever at any time, no enlargement of the liver or spleen, and the heart and lungs were healthy; 1,800 c.cm. of urine were passed in twenty-four hours, with a specific gravity of 1018, an acid reaction, and 3.5 per 1,000 of albumen and 1.7 per cent. of urea; no casts or bilharzia ova were found. The albuminuria persisted throughout the treatment, but there was never any anaemia or other evidence of nephritis.

The boy was thin and anaemic, and his blood count, which was kindly done for me by Dr. Anis Onsy, Assistant Professor of Pathology, worked out as follows: White blood corpuscles, 10,250; red blood cells, 2,900,000 per cubic centimetre of blood.



Fig. 1.—Photograph taken on admission to hospital. The characters of the papilliform elevations and their distribution are well seen, and also the outlying papules on the thighs and abdomen. Dark points of pigment are also to be seen on the thighs and abdomen.

Differential count: Polymorphonuclears, 70 per cent.; large mononuclears, 8 per cent.; lymphocytes, 19 per cent.; eosinophiles, 2 per cent.; transitionals, 1 per cent. Two hundred leucocytes were counted. No filarial embryos could be discovered in the blood after repeated examinations.

#### *History.*

The patient stated that five years ago he began to notice scattered purplish points on the scrotum, which at first he took to be flea-bites. To his surprise, each began to project above the surface of the skin, and in a year's time the scrotum was

covered with tiny pedunculated elevations, which gave rise to considerable itching when he became hot. The spots on the thighs and loins appeared three years ago, and spread on to the abdomen. He thought that wherever the fluid from one of the growths fell another developed, and if he cut one off another came in its place. The family history was good, and there was no personal or family history of syphilis.



Fig. 2.—Posterior view of the patient, showing the scattered papules; but the main feature is the pigmented petechial spots, which are especially thickly sown over the lumbar and gluteal regions.

The diagnosis presented considerable difficulty, as it resembled nothing that any of us had ever seen, and Sir William Osler, who was in Egypt at the time and was

good enough to see the case with me, was equally puzzled to decide how to classify it. The peculiar subcuticular spots suggested a blood origin, but this view was not supported by the other symptoms or the examination of the blood; and we had, therefore, to depend upon the pathological examination of the growths themselves to establish a diagnosis.

*Pathologist's Report.*

Professor A. R. Ferguson, Professor of Pathology, first examined smears from the cut surfaces of the growths, and reported that no definitely specific parasite could be found. The contents comprised: (a) A large coccus in considerable numbers; (b) a yeast, also abundant and actively budding—a comparatively small yeast; and (c) a long slender bacillus



Fig. 3.—Photomicrograph showing the minute microscopical appearances of one of the vesicles. (See text.)

rather like *B. lepra*, but not acid-fast. No protozoan parasites were to be made out. A strip of skin was next removed from the centre of the affected scrotum; and it was seen that the deep surface of the skin was quite smooth, but showing through it were many prominent sebaceous glands, forming minute elevations visible through the connective tissue. These elevations did not correspond with the vesicles, which were more superficial, and could not be seen from the under surface. The skin itself was not thickened, and the growths when cut into appeared as thin-walled cavities filled with a dark fluid.

Professor Ferguson made a further report on the microscopical examination of the removed strip as follows: "Here-

with a note on the warty condition of the scrotum and a photomicrograph of one of the vesicles—lymphangiomas as I consider them. Numerous film preparations stained by Giemsa's method were examined. No protozoan parasites of any kind were met with. The cells of a small yeast were present on most of the occasions on which films were made. The bacteria present included large diplococci as well as short streptococci, but these all were of accidental and superficial character, and none were found deeply in the substance of the lesion.

"Examined in microscopical sections the lesion is found to consist of enormous numbers of small lymphangiomatous structures, the material in the dilated spaces of which they are composed being apparently coagulated lymph. These little lesions are quite superficial, the skin over them being considerably thinner than elsewhere. They are capped by a layer of keratinized epithelium of greater thickness than that found in parts of the scrotum in which the lymphangiomas are absent. (Fig. 3.)

"Most of the lymphangiomas are composed of about a dozen vascular spaces of irregular size. They are separated from one another by small trabeculae of recent connective tissue. The majority of the spaces contain a homogeneous finely granular material with very few cells, and these are mainly of the small mononuclear variety. Into some of the larger spaces of the lymphangiomas haemorrhage has occurred."

#### *Treatment.*

The line of treatment was not very clear, but on Sir William Osler's suggestion a prolonged course of *x* rays was carried out by Mr. W. M. Colles, Assistant Professor of Chemistry. A soft tube, at 15 cm. distance, was employed, starting with an exposure of five minutes and gradually working up to twelve minutes, without the slightest effect; and finally, at the earnest request of the patient, I excised the whole of the affected area and made him a new scrotum from the surrounding skin of the thighs, perineum, and buttocks. He left hospital three weeks later, there being still a few growths on the body of the penis. The pigmented spots had somewhat faded during his lengthy stay in hospital, but were otherwise unchanged.

#### *Remarks.*

The microscopical examination appears to limit the question of diagnosis to two pathological groups—angioma and lymphangioma, or to one or other of their many varieties. My opportunities of consulting recent modern literature on this and allied subjects is very limited, but in the last edition of Sir Malcolm Morris's *Diseases of the Skin*, pp. 665-670, the main characters of both these conditions are described, thus enabling me to make a comparison between them and the case under discussion.

The photomicrograph furnishes the most convincing diagnostic evidence, as it distinctly shows that the essential part of the lesion consists in epithelial covered vesicles in the superficial layers of the skin, and that these are really new formations of multiple minute lymphangiomas, filled with coagulated lymph and coloured by old haemorrhage that has occurred into some of these spaces.

Having thus stated our case, we may now compare our findings with the other diagnostic possibilities as presented in the work before us. It is therein stated that "angio-keratoma is characterized by the development of capillary telangiectases with small, warty growths on the hands and feet, chiefly on the dorsal aspects. It has been known, however, to occur on the scrotum. The fully-developed lesions are rough on the surface, hard, and sometimes covered with thickened epidermis to resemble warts. Further, this condition is always associated with a marked tendency to chilblains," a condition which is non-existent in Egyptians. "The essential feature of angio-keratoma is telangiectases resulting from repeated temporary dilations of the small blood vessels."

A reference to the description of our case will readily show wherein it differs from angio-keratoma, nor does it bear any resemblance to infective angioma or to angio-fibroma contagiosum tropicus (q.v.). There is, however, much more similarity to lymphangioma. "The ordinary form, lymphangioma circumscripta cutis, is characterized by an overgrowth and dilatation of lymph vessels and the formation of new ones in circumscribed areas of the skin. Patches of greater or lesser extent are found covered with clusters of small vesicles." "They are pale or straw-coloured, and contain clear alkaline fluid in which a few lymph corpuscles are found." "Bernard holds, as does Brocq, that the disease is primarily one of the lymphatics, and that the appearance of blood is due either to the rupture of capillaries into the lymphatic dilatations, in which case the fluid of the vesicle is pinkish." In our case, however, the pigmentation was a marked feature, even allowing for the darker Egyptian skin, and, moreover, the presence of pigmented points, apparently due to haemation, in so many other parts of the skin surface makes it probable that this same pigment was responsible for the pigmentation throughout. The presence of this pigment serves also to distinguish the case from lymphangioma tuberosum multiplex.

It may be that the condition we have described is one of the varieties of haemato-lymphangioma, but we are still at a loss to explain the association, if any, between the pigmented papilliform elevations and the petechial spots so widely distributed elsewhere.

We therefore submit the case for diagnosis to this more experienced tribunal, and trust we have made our description sufficiently clear to enable more highly qualified judges than ourselves to catalogue the case under its proper heading.

My best thanks are due to my friend and colleague, Professor Ferguson, for his careful study of the pathological side of this question, and to Dr. Tewfik Omar, Resident Surgical Officer, and to Dr. Ismail Diaiy, my House-Surgeon, for the excellent notes with which they have provided me.