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Varicella Complicated  
by gangrene of the scrotum.





**VARICELLA COMPLICATED BY GANGRENE OF  
THE SCROTUM.**

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JONATHAN HUTCHINSON was the first to draw the attention of the medical profession to a complication of varicella characterized by the development of gangrene of the skin and deeper tissues at the site of the eruption. Since his memorable article on "Gangrenous Eruption in Connection with Vaccination and Chicken-pox,"<sup>2</sup> similar cases have been reported from England by Abercrombie,<sup>3</sup> Martin,<sup>4</sup> Howard,<sup>5</sup> Jamieson,<sup>6</sup> Andrew,<sup>7</sup> Bowlby,<sup>8</sup> Payne,<sup>9</sup> Crocker,<sup>10</sup> and Stanifooth.<sup>11</sup> The United States and Germany are represented in the literature on the subject by two authors each: the first by Woodward<sup>12</sup> and A. F. Büchler,<sup>13</sup> and the second by Demme<sup>14</sup> and Cassel.<sup>15</sup> Whether the children of other nationali-

<sup>1</sup> Read before the Philadelphia County Medical Society, February 13, 1895.

<sup>2</sup> Med.-Chir. Trans., vol. lxxv, p. 1.

<sup>3</sup> Trans. Path. Soc. Lond., vol. xxxi, p. 333.

<sup>4</sup> Brit. Med. Journal, 1881, vol. ii, p. 803.

<sup>5</sup> Ibid., 1883, vol. i, p. 904.

<sup>6</sup> Trans. Med. Soc. Edin., 1886-87, vol. vi.

<sup>7</sup> Clinical Record, 1890, vol. i, p. 63, and Trans. Clin. Soc. Lond., vol. xxiii, p. 79.

<sup>8</sup> Lancet, London, 1885, vol. i, p. 987.

<sup>9</sup> Trans. Path. Soc. Lond., vol. xxxvi, p. 471.

<sup>10</sup> Med.-Chir. Trans., vol. lxx, p. 397; Lancet, 1885, i, and Roy. Med. Chir. Soc., 1885, p. 282.

<sup>11</sup> Med. Press and Circular, London, 1890, vol. xlix, p. 37.

<sup>12</sup> Pacific Med. and Surg. Journal, 1889, vol. xxxii, p. 197.

<sup>13</sup> Amer. Journ. Med. Sci., 1889, vol. xcvi, p. 265.

<sup>14</sup> Wiener med. Blätter, 1892, vol. xv, p. 37; Klin. Mitth. aus d. Geb. d. Kind., 1891, 38.

<sup>15</sup> Archiv für Kinderkrankheiten, 1894, vol. xvii, p. 371.



ties are exempt from this complication, or the cases have not been reported, I do not undertake to decide. So far as my researches go I have been unable to find a single case in French, Italian, Russian, or Spanish medical literature. The rarity of the complication in general, and the exceptional features of the case that came under my treatment in particular, seem to justify me in reporting it.

The patient was a boy of Russian parentage, aged two years, whose father and mother are healthy, with no scrofula or tuberculosis in the family, and with five other children all well and healthy. He had had no serious illness previous to the attack of chickenpox. As I saw the case for the first time only on the eighth day of the disease I have to rely upon the data furnished by the parents, who proved to be tolerably good observers and quite reliable. On November 25, 1894, the chickenpox was noticed for the first time; on the 26th the child became restless and had fever; on the 27th the fever increased, the child was delirious, and the scrotum became red and swollen. This state continued until the 30th, when the swelling extended to the left inguinal region; a black spot the size of a pin-head had appeared on the left side of the scrotum, and soon several others formed a circle around the original one and coalesced. On the following day another black spot appeared a little further to the left on the scrotum, and "before one had time to look at it," as the parents expressed themselves, the process of deep ulceration and "eating up" commenced. On December 3d I saw the child for the first time. It was well preserved and plump, as seen by the photograph and by its appearance now, and somewhat irritable. The penis, the scrotum, and the left inguinal region were very much swollen and tender. The left side of the scrotum was covered by blackish, muddy-looking crusts and detritus covering about two-thirds of it and passing over the raphe to the right side. The smell was very offensive. The crusts and detritus were carefully removed and the tunica albuginea of the left testicle was exposed to view, thus showing that the gan-

grenous process destroyed not alone the integument but also the dartos, the external, cremasteric, and internal fascias, and the tunica vaginalis. There was a distinct areola around the ulcer. The presence of pus in the inguinal region was easily demonstrated by fluctuation and also by the oozing from a very small spontaneous opening found about half an inch from the scrotum. The temperature was 101.6°, the pulse 110. Pressure over the bubo gave pain, but the handling of the ulcer



was almost painless. I washed the parts with mercuric chlorid and applied an iodoform-gauze dressing and a bandage. On the following day, when the bandage was removed, the ulcer was found to present a somewhat better appearance, but was still angry-looking and covered with pus from the oozing aperture. The child was anesthetized by Dr. Rachel Skidelsky, and introducing the grooved director through the opening I laid open the inguinal region throughout its length, as shown in the photograph. I cleansed the wound thoroughly and packed it with iodoform-gauze. (The photograph was

aken at this juncture, and shows the incision with the packing in it; the left testicle exposed and many spots of dried-up vesicles all over the body.) The ulcer was dressed with mercuric-chlorid gauze saturated with hydrogen dioxid, and a T-bandage applied. Of course, the ulcer required a good deal of trimming for the removal of dead tissue. I ordered two grains of quinin to be given in the evening and two grains in the morning. It was then that I noticed that three children in the same family had varicella in different stages of development. There were no complications in the other cases.

On the following day the temperature fell to 99.2°; the child slept almost the whole night, the first time since it had been sick; the ulcer and wound were clean and the gangrenous process checked. The local treatment was continued the same during the entire period of the regeneration of the scrotum, which took about thirty-five days. The repair is complete and admirable, leaving only a star-shaped cicatrix. No internal treatment was needed after the third day.

Through the kindness of Dr. J. S. Billings, Deputy Surgeon-General U. S. Army, I was enabled to trace the literature on the subject antedating the report of Hutchinson. Besides the mention by Hutchinson of two cases in Guy's Hospital Museum, which were named varicella escharotica, and the case of Stokes described in 1807 in his *Dublin and Physical Essays on Eruptive Diseases of Children*, which he named pemphigus gangrænosa, and which, according to Hutchinson, are to be regarded as cases of varicella gangrænosa, the following cases were reported and minutely described by their respective authors as varicella complicated by gangrene: Dr. Humphrey Storer,<sup>1</sup> Steinthal,<sup>2</sup> Loewenhardt,<sup>3</sup> Dr. Frederick J. Brown,<sup>4</sup> of Rochester, and Dela Harpe.<sup>5</sup>

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<sup>1</sup> Boston Med. and Surg. Reporter, 1828, vol. i, p. 212.

<sup>2</sup> Analekten, 1843, pp. 1-43.

<sup>3</sup> Rheinische Monat. für Prakt. Aertz., Köln, 1850.

<sup>4</sup> Brit. Med. Journ., 1863, vol. ii, p. 420.

<sup>5</sup> Bull. Soc. Méd. de la Suisse Rom., 1869.



