every ten or fifteen minutes after severe straining, would pass a few cubic centimeters of cloudy urine.

Examination.—This showed a poorly-nourished man. Rectal examination evidenced no outspoken enlargement of the prostate. Attempts to pass a catheter were unsuccessful. The catheter first met obstruction about 4 cm. from the meatus, but this could be passed and complete obstruction was encountered at the bulbomembranous portion of the urethra. Attempts were made to pass a filiform, but unsuccessfully. Following instrumentation, the temperature rose to 104, and patient had a severe chill. On the following day, another attempt was made to pass a filiform, but with no better result.

Operation.—External urethrotomy, Dec. 27, 1912. Under an anesthetic an unsuccessful attempt was made to pass a filiform. The urethra was then injected with a solution of methylene blue, the patient placed in the lithotomy position, and a sound passed to the bulbomembranous portion of the urethra. A midline incision was then made in the perineum just back of the bulb and the tip of the sound incised on. The urethra was found to be stained but when the attempt was made to trace it, it was found that the sound was in a false passage, to the right of the true passage, which was easily located, leading off from the urethra about 1 cm. above the tip of the sound. The minute blue-stained urethra then led through a dense mass of scar tissue, which was laid open and a gush of blue-stained urine showed that the stricture had been incised. The stricture in the pendulous portion of the urethra was then dilated with a sound, the scar tissue about the urethra excised and a catheter passed through the meatus. The urethra was sutured about this and a small drain inserted. This patient made an uneventful recovery.

This case is instructive. One might easily be misled in incising in the midline of the perineum directly from the tip of a sound; in this case the small strictured urethra would certainly have been missed.

The advantages of staining the urethra in impassable stricture may be summed up as follows: It allows one to follow the canal into the bladder. It utilizes the mucosa of the urethral canal. It allows the recognition of false passages, and renders, in many instances, what may be a most difficult operation a comparatively simple one.

ACUTE RHEUMATIC ORCHITIS

REPORT OF A CASE ASSOCIATED WITH ERYTHEMA NODOSUM AND ACUTE TORTICOLLIS IN A CHILD AGED TWO AND ONE-HALF YEARS

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Acute so-called metastatic orchitis is more or less uncommon at any age, but in infancy or early childhood is of extreme rarity. The case described below in which such an inflammation of the testis occurred in a child aged $2\frac{1}{2}$ years is therefore sufficiently unusual to warrant a detailed report.

Patient.—Harry G., $2\frac{1}{2}$ years old, of Russian parentage, was brought to Mount Sinai Hospital dispensary on Jan. 4, 1913. He is the older of two children. Parents are healthy; there is no history of tuberculosis in the family.

Past History.—Breast-fed eleven months. At 20 months, measles complicated by pneumonia. Good recovery. At age of 2 years, acute swelling below the left ear, accompanied by malaise and fever; diagnosed by a physician as mumps. Good recovery and no sequelae. Three weeks ago acute pustular eczema on the buttocks; lesions rapidly healing.

Present Illness.—This began one week before admission with malaise and fever. The child was cross and fretful and refused to eat; vomited twice. Bowels were regular; there

was no cough. The day before admission the mother noticed that the child's neck was stiff and that he cried whenever she picked him up.

Physical Examination.—Well-developed child. Face flushed and eyelids somewhat puffy. Very irritable; screams when an attempt is made to hold him. Head held rigidly with the face turned toward the left shoulder; attempts at rotation evidently attended with much pain. Cervical lymph-nodes palpable as pea-sized nodules on both sides of the neck. Other superficial lymph-nodes not enlarged.

Skin. Over the buttocks and the upper part of the thighs there is an eruption of papular eczema, most of the lesions of which are in the process of healing. On the left leg over the shin there is an eruption consisting of several indurated nodules each about the size of a dime. The skin over these is bluish-red in color and distinctly hot.

Throat. Deeply congested, but shows no enlargement of the tonsils nor any exudate.

Teeth and gums. Negative.

Heart, lungs and abdominal viscera. Apparently normal.

Temperature. 102.5 F.

Urine. Except for a very faint trace of albumin, negative.

Diagnosis.—Acute pharyngitis, left-sided rheumatic torticollis, erythema nodosum. Old pustular eczema.

Treatment.—Two grains of aspirin four times a day was ordered and methyl salicylate was applied over the left leg.

January 7: Child appears improved. Temperature 100. Torticollis has disappeared. Pharynx less congested. A new crop of erythema nodosum has appeared over the right shin. Treatment to be continued.

January 9: The mother states that a day ago the child began to complain of pain about the genitals and that since twelve hours the scrotum has become swollen. No history of trauma. Examination shows the scrotum enlarged to twice its normal size. Marked local heat. Skin of scrotum edematous and dusky in color. Left testicle is felt enlarged to about the size of a hickory-nut; exquisitely tender. Right testis normal. Apparently no hydrocele is present. No urethral discharge. Temperature 100. Child looks sick. No evidence of torticollis. Parotid glands apparently perfectly normal. A few new efflorescences of erythema nodosum are present on both thighs. Salicylate treatment to be continued, and ice-bag to be applied to the scrotum.

January 10: General condition of child improved. Appetite returning. Temperature 99.4. The skin of the scrotum is less edematous and the testis can be distinctly felt. The body of the testis is especially involved; the epididymis to a less degree. A blood examination on this day gave the following result: Hemoglobin 85 per cent. Red blood-cells 4,568,000. White cells 11,000. Differential count; polymuclear neutrophils 57.5 per cent.; large lymphocytes 8.5 per cent.; small lymphocytes 33.5 per cent.; eosinophils 0.5 per cent. Urine: clear, acid, specific gravity 1.010. Very faint trace of albumin. Microscope shows an occasional pus cell; no casts.

January 11: Condition improving.

January 14 to 25: Child's condition good. The testicle gradually returning to normal size, the epididymis being the last portion to be involved. Temperature has remained normal.

January 25: Discharged cured.

February 18: Child well. No atrophy of testis. Von Pirquet test positive.

To sum up, then, we have here a child who in the course of an attack of erythema nodosum and a torticollis, develops a unilateral acute orchitis, which after two weeks goes on to complete recovery.

LITERATURE OF THE SUBJECT

Acute metastatic orchitis has been described as occurring in a number of diseases, among which may be mentioned mumps, variola, angina, influenza, pneumonia, typhoid, paratyphoid, malaria, scarlet fever, pyemia and rheumatism.

The orchitis of mumps is probably the variety most often seen, though in young children it is unusual. It

is most frequent in young adults and when it occurs in childhood is usually found in individuals approaching the age of puberty. The statistics given by Hutinel and Darré¹ are of interest in this connection: Barthez and Sanné noted in 230 cases of mumps ten cases of orchitis of which seven were in boys between the ages of 15 and 17. Rilliet, Henoch and Comby never observed a patient under 14 years of age. Steiner has seen a case in a nursing whose parents were suffering from mumps; and two other patients, aged 4 and 9 years respectively, are reported by French physicians. The testicle may be the first and at times the only seat of the disease, the parotid not being involved, as in a case reported by Beardsley² in which the brother of a child ill with parotitis developed an acute orchitis. The orchitis of mumps usually lasts from eight to ten days and may be followed by atrophy of the testicle.

The connection between rheumatism and acute orchitis has long been noted, though reports of cases are very infrequently found. On this subject Roderick Macleod,³ writing in 1842, says:

I think I have several times seen rheumatism of the tunica albuginea testis. Persons subject to rheumatism have complained of acute pain coming on suddenly accompanied by increased heat and by great tenderness to the touch, but without tumefaction; the symptoms shifting from one testis to the other and at last disappearing as suddenly as they had come on—just in the manner we see rheumatism change from one joint to another.

Cheadle⁴ fails to mention orchitis, and numerous text-books on genito-urinary diseases, both in English and in German, devote but little space to the subject. It is chiefly to French clinicians that we are indebted for drawing attention to this form of orchitis. Besnier⁵ describes the condition in detail and numerous French theses have been written on the subject.⁶ Testicular inflammation may precede or accompany an attack of acute articular rheumatism and the characteristics of the orchitis are the same as of that occurring in mumps. Usually it is a simple inflammation, bilateral or involving first one side then the other; its duration is usually not beyond that of the arthritic symptoms, but in rare cases it may go on to atrophy. Several of the cases described were complicated by hydrocele.

Closely related to this variety of orchitis is that seen as a complication of tonsillitis, of which cases are occasionally reported.⁷ Teyssyre⁸ has described a case in a man 26 years old, and has collected reports of nine other cases from the literature, all of them occurring in adults. Clinically this variety resembles rheumatic orchitis, being usually unilateral, coming on suddenly, lasting five to fourteen days and rarely going on to atrophy or suppuration. Hutinel and Nobécourt¹ comment on the rarity of this complication of sore throat in children, pointing out that here, as in the other types mentioned above, the testis seems much more vulnerable after it has taken on full functional activity.

Finally may be mentioned that a few cases of acute orchitis in children have been reported as a complication of influenza.⁹

The most logical diagnosis of the case above reported appears to be that the whole syndrome is a manifestation of rheumatism. The symptoms can certainly all be explained as the result of some acute infectious agent entering most probably by way of the pharyngeal mucosa or the tonsil, affecting the neck muscles and thus causing a torticollis, giving rise to toxic manifestations in the skin in the form of a nodular erythema and finally localizing in the testis and there producing a sudden acute orchitis. Since each of these four conditions—pharyngitis, torticollis, erythema nodosum and orchitis—has been described as a manifestation of acute rheumatism, it appears the correct diagnosis in this case in spite of the fact that the patient was but 2½ years of age. Rheumatism in early childhood is a very uncommon condition, but undoubted cases have been recorded even in infants under one year of age. It is well known that in children of any age the articular symptoms are the least prominent of the various rheumatic manifestations and this is particularly true of young children and infants. Two cases of torticollis, however, which lasted but a few days and cleared up on the administration of salicylates, have been reported by Wachenheim¹⁰ in babies aged, respectively, 14 and 16 months, and arthritis, though acknowledged to be very rare, has been described as occurring even in early infancy. Thus Miller,¹¹ in 1899, collected reports of nineteen cases of acute articular rheumatism in infants under one year, while Schlossman,¹² in 1903, reported several others in very young children.

The classification of erythema nodosum as a rheumatic affection may be questioned by some, since many clinicians now believe that erythema nodosum should be looked upon as a separate clinical entity akin to the eruptive fevers, Abt.¹³ But as the eruption has been described as occurring in the course of various infectious diseases as diphtheria, typhoid, streptococcemia, scarlet fever, rheumatic fever and tuberculosis, there is still considerable support for the theory that the eruption is merely a local manifestation of some general intoxication.

The fact that the child showed a positive reaction to the von Pirquet test is also of interest in view of the fact that a very close relation is supposed by some to exist between erythema nodosum and tuberculosis.¹⁴ From the clinical course of this illness and the complete recovery, however, there does not seem to be any reason to suppose that tuberculosis infection was a factor in its etiology.

Testicular mumps may be excluded by the following: the patient's parotid glands were normal throughout the illness; the child was constantly with a brother, who at no time showed any symptoms of mumps, and finally there is a clear history of an attack of mumps in the patient seven months previous to the beginning of this illness.

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9. Barnes, E. C.: Brit. Med. Jour., March 15, 1890. Flossinger De l'orchite grippale, Gaz. méd. de Paris, Feb. 4, 1893.
10. Wachenheim, F. L.: Rheumatic Affections in Children, Arch. of Pediat., September, 1908.
11. Miller, D. J. Milton: Acute Articular Rheumatism in Infants under One Year, Arch. of Pediat., September, 1899.
12. Schlossman: Ueber Akuten Gelenkrheumatismus und symptomatisch ähnliche Erkrankungen im frühen Kindesalter Monatsschr. f. Kinderh., February, 1902.
13. Abt, Isaac A.: Erythema Nodosum, THE JOURNAL A. M. A., Nov. 12, 1904, p. 1454.
14. Meara and Goodridge: The Relationship Between Erythema Nodosum and Tuberculosis. Am. Jour. Med. Sci., March, 1912.

1. Hutinel: Les Maladies des Enfants, Paris, 1909.
2. Beardsley, J. G.: New York Med. Jour., Jan. 25, 1908.
3. Macleod, Roderick: Rheumatism and Its Various Manifestations, London, 1842, p. 20.
4. Cheadle: Article on rheumatism in Albutt's System of Medicine, 11, Part 1, p. 645.
5. Besnier: Dictionnaire et Encyclopédie des Sciences Médicales, 1877, 1v, Series 3, p. 606.
6. Reulos, A.: Contribution à l'étude de l'orchite rhumatismal, Paris thesis, 1904. Bach, J.: Essai sur l'orchite parotidienne et rhumatismal, Paris thesis, 1871. Delefosse: Ann. d. mal. des organes génito-urinaires, 1894, xii, 300.
7. Prouty, I. H.: Orchitis Secondary to Tonsillitis Treatment with Hexamethylenamin, THE JOURNAL A. M. A., April 20, 1912, p. 1192.
8. Teyssyre, A.: Manifestations testiculaires dans les amygdalites aiguës, Paris thesis, 1900.