bleeding points by the method adopted by the neurological surgeon but to excise hopelessly damaged tissues and torn edges. Incisions of the face and inside the mouth by the diathermy needle, used with a light hand, heal quickly and well. Ligatures are avoided whenever possible. Haemorrhage from the nose is controlled by packing with adrenaline gauze. The wound is thoroughly cleaned and loose fragments of bone and all accessible foreign bodies are removed. Efficient drainage is established, and the mucous membrane and skin are sutured loosely and without tension by interrupted black synthetic horsehair or fine silkworm-gut stitches. The wound is dusted with boric powder; a dressing is better avoided, but if oozing is troublesome a light one is applied for twelve hours only, being then replaced by boric powder. When the patient is returned to bed he is kept in a sitting position, preferably by a modern Fowler bed. This position is important because drainage is better, haemorrhage and oedema are diminished, and the patient is less likely to develop pneumonia.

Stitches are removed early, about the fourth day. Alternate stitches, if loose, can be removed earlier. If suppuration develops some of the stitches are removed.

I am convinced that early operative treatment and suture of face wounds before the inflammatory reaction sets in prevent a considerable amount of suppuration, haemorrhage, and deformity, and many tedious plastic operations.

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TWO COMMONLY MISUNDERSTOOD SKIN CONDITIONS IN INFANCY

BY

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Probably there is no branch of medicine in which so much superstition exists as in the minor ailments of infancy. No doubt this is largely due to the influence of folk-lore, well-meaning grandmothers, and certain nurses who control this department of medicine. Some of the conditions are so prevalent and so mild that the practitioner does not come much into contact with them, and when he does he cannot sustain enough interest to investigate them. This is noticeable when search is made in the literature, for in comparison with the great mass of papers that obstructs investigations into some subjects the published work on a matter such as napkin rashes is very scanty indeed.

The Scurfy Head

In a consecutive series of 100 infants forty-five had what is sometimes called a scurfy head, and the mothers of a further twenty-one gave a history of this condition. Under the names of scurfy head, seborrhoea, and seborrhoeic dermatitis are confused two entirely different conditions, which may perhaps be clarified by calling them milk crust and pityriasis capitis.

Milk Crust.—This is a very common condition in young infants, especially those in poorer families. A yellow or yellowish-green crust in thick large flakes, or even a continuous layer, is found on the vertex of the skull, especially over the anterior fontanelle. This condition has been attributed variously to a persistence of the vernix caseosa or to an excessive secretion of the sebaceous glands—a true

seborrhoea. In reality it is the result of three factors: (1) lack of soap and water; (2) application of olive oil and vaselin; and (3) the disinclination of the mother to apply friction over the anterior fontanelle. A majority of mothers in the working classes believe that soap must not be used on the scalp; the reason they give is that it causes scurf. Paradoxically enough, a mother who has never used soap for this reason will bring along a baby with extensive scurf and still refuse to clean the child's head properly, although soap could not have been responsible, as it had never been applied to the scalp. Instead she will persist in rubbing in olive oil or vaselin and, because she is afraid of causing injury over the fontanelle, not rubbing it off. The milk crust is thus largely olive oil or vaselin and dirt. There is no reason why a toilet soap should not be applied to the child's scalp, provided that the skin itself is not inflamed. The treatment for this condition is very simple—soap and water and a little energy.

Pityriasis Capitis (Simple Dandruff).—This condition is often confused with milk crust and is often combined with it. The scurf consists of very fine small white scales. It is not confined to the vertex, but spreads all over the scalp and to the eyebrows. The skin itself may become inflamed and there may be scratch marks. It is very likely that some of these cases proceed on to infantile eczema, but this is difficult to prove. In view of this possibility it is most desirable that the condition be quickly brought under control. This is easily managed by the application of a weak sulphur and salicylic acid ointment, say 1 per cent. This ointment should be kept handy at infant welfare centres. A series of fifteen cases were treated in this manner, with only one unsatisfactory result. It is in some of these cases, in which some inflammation may exist, that the use of soap is inadvisable.

A large number of cases of scurfy head are a combination of these two conditions. In a consecutive series of thirty-nine cases seventeen were milk crust—that is, oils and dirt—ten appeared to be purely cases of pityriasis capitis, and twelve were a mixture of the two. It is probable that pityriasis capitis is an affection most likely contracted from the nearest relatives, especially the mother. Some figures tend to bear this out. Of sixty-four mothers who complained of dandruff and had single infants, fifty-four had infants with scurfy heads—that is, 84 per cent. Of forty mothers who did not complain of dandruff, twenty-six had infants with scurfy heads—that is, 65 per cent.

Napkin Rash

My purpose here is to describe a single form of this rash, and by far the most common. If we wish to impress the mother we may call it dermatitis simplex infantilis of Jacquet (1905). Granny and the nurse will call it a teething rash, and most mothers feel hurt if they are told that it is a napkin rash.

The rash occurs in the napkin area, more over the prominences than in the flexures, and is said to involve the calves and heels if they come in contact with the napkin. Mild cases show just an erythema, but the condition may proceed to vesication, papules, and ulceration. It has very definite clinical features, the most important of which is the smell of ammonia that accompanies it. This odour arises from the soiled napkin, and not from the urine if passed directly into a chamber. The chief features are: (1) the smell of ammonia; (2) age—this condition rarely occurs under the age of 3 months, and may continue until the child has learned cleanly habits; (3) both the odour and the rash are worse in the morning when the mother removes the napkin; (4) the disease is commoner in the poorer classes; (5) the incidence is much greater in the winter months; and (6) any abrasion, ulcer, or rash in the napkin area sustains and worsens the condition.

The following table, which consists of statistics collected at three infant welfare centres, A, B, and C, shows the

incidence of the rash under different social conditions. Centre A is in a middle-class residential part of Ilford, centre C is in a poorer working-class section, and centre B is socially intermediate. The figures relate to a week in January and a week in July.

Centre	January			July		
	Ammoniacal Smell only	Odour and Rash	Normal	Ammoniacal Smell only	Odour and Rash	Normal
A	9	4	8	12	0	14
B	6	6	2	6	2	11
C	6	8	3	4	0	12

Of the mothers of fifty-two infants seen consecutively in a week in January, thirty-nine (75 per cent.) stated, after a leading question, that the napkins smelt of ammonia. In July, in twenty-four (39 per cent.) of sixty-one cases, the mother made a similar statement. The incidence of the rash itself was 35 per cent. in January and 3 per cent. in July. It may be mentioned that the weather was rather cold and very warm respectively in the chosen weeks. In January, in centre A four out of twenty-one had a rash, and in centre C eight out of seventeen, corroborating—but not proving, as the figures are too small—the clinical impression that the condition is commoner among the poorer classes.

Aetiology of Napkin Rash

1. *Ammoniacal Odour*.—There can be no doubt that napkin rash is an ammoniacal dermatitis, and accordingly may be classified as a dermatitis venenata. However, there is no unanimity as to the origin of the ammonia. Cooke (1921, 1926) has gone very carefully into the problem, and has come to the conclusion that a Gram-positive bacillus derived from the faeces splits up the urea and causes the formation of ammonia. To inhibit the growth of the organism he recommends that the napkins be soaked in 1 in 4,000 perchloride of mercury. Pritchard (1938), however, insists that the condition is an acidosis which gives rise to an excess of ammonia salts in the urine, and that it is cured by prescribing alkalis. This explanation does not seem to account for the age, social, and seasonal incidence of the disease, and I refuse to believe that 75 per cent. of the healthy babies in Ilford suffer from acidosis in cold weather. As to alkalis curing the disease, most nurses would attribute an equal charm to barley-water, which they universally prescribe with reasonably satisfactory results.

Most textbooks mention alkaline soaps and soda used in washing the napkins as the cause of the disease, either by direct irritation or by the displacement of the ammonia from its salts. This cannot be the case, however, as most mothers are careful in the choice of the soaps they use, and very few indeed use soda. The bacteriological theory appears the most tenable if to the Gram-positive bacillus of Cooke be added other commensal and pathogenic organisms found on the skin, since observation shows that ulcers and abrasions of any kind tend to prolong the disease.

2. *Age Incidence*.—The condition very rarely occurs under the age of 3 months. This raises some interesting problems, and considerably simplifies the differential diagnosis. The younger the infant the more frequently it passes urine, and the more often would its napkins require changing. This suggests that ammoniacal decomposition would occur more frequently, but the opposite is the case. Perhaps this is due to the fact that the urine of small infants is more dilute or that the bacillus from the stool has not yet developed. Above the age of 3 months the vast majority of cases of napkin rash are the effect of ammonia; below this age the smell of ammonia is absent, and one must consider other conditions, such as syphilis, thrush, acid stools, and the very common but not often mentioned septic follicular rash found in the napkin region in infants in the first few weeks of life.

3. *Nocturnal Incidence*.—This feature in the aetiology is very important, and is usually ignored. A careful mother can change an infant's napkins with regularity during the day, but even in the best of families the child must remain damp for some hours at night. If the trouble starts, therefore, it may continue in spite of the best attention to napkin hygiene, and the mother is naturally indignant if the napkins are blamed as the source of the trouble. We have come so to take for granted the inescapable inconveniences of life that no one seems to think it unnatural that an infant must soak for hours in its own urine. There appears to be no solution to this problem. The rash when it occurs is easily cured; prophylaxis, however, is very difficult, especially in the poorer home.

4. *Social Incidence*.—That the disease is commoner in poorer families is no doubt due to the obvious fact that the poorer mother often has not got the time to change her infant's napkins when required, and cannot have the napkins washed with the regularity and thoroughness possible in better-class homes. Similar reasons no doubt explain why the condition is commoner in twins.

5. *Seasonal Incidence*.—Clinical descriptions seem to ignore the fact that in this country the rash is predominantly a cold-weather disease. One may speculate as to why this is so. Possible explanations are, first, that urine is passed more copiously in cold weather; secondly, that napkins are changed less frequently on cold nights, perhaps because the mother has to get out of bed to do it; and, thirdly, that conditions for drying and airing napkins are less favourable for the poorer family.

Waterproof knickers, if they result in the retention of wet napkins, obviously tend to cause or prolong this condition; but if napkins are changed regularly they do little harm, unless worn at night.

Unlike pityriasis capitis, napkin rash is a self-limited disease, and never results in eczema. Perhaps that is why so little interest is taken in it to-day. There was a time when it was much discussed in order to differentiate it from syphilis (Adamson, 1908). This problem should now rarely present difficulties. Other conditions must be considered in the differential diagnosis, but they will not be discussed here, as they are not often seen in the welfare centre in infants above the age of 3 months.

Meatal Ulcer

A fairly common and distressing condition found in male circumcised infants is an ulcer with crusting at the urinary meatus. This is very painful and causes the infant to retain his urine as long as possible. There generally appears to be some narrowing of the meatus. The mother usually asserts that the surgeon who performed the operation did it carelessly. Other people think that the condition is the result of friction with the napkin or clothing. The surgeons, as recent correspondence in the *British Medical Journal* has shown, have elevated this condition into a congenital disease—"congenital stricture of the meatus"—and treated it by meatotomy. I have sent several cases to the Infants Hospital, Vincent Square, for this treatment, with very satisfactory results, except for one case in which the ulcer spread after operation and became almost phagedaenic. However, the mothers of these children always complain of the strong ammoniacal smell of the napkins, so the impression was formed that this condition might well be due to the effect of ammonia on the sensitive epithelium of the glans penis exposed by circumcision, combined with the trauma caused by the stream of urine against a meatus that might be a little narrower than normal. Should this be the case meatal ulcer would be essentially a cold-weather disease, as is the napkin rash. Through the courtesy of Dr. John Tillie the dates of the operations for meatotomy for the

last five and a half years at the Infants Hospital, Vincent Square, were forwarded to me. Arranged in the months during which they were performed, they occur thus: January, 5; February, 4; March, 1; April, 2; May, 2; June, 2; July, 1; August, 1; September, 2; October, 4; November, 8; December, 8. That is, thirty cases were operated on in the months October to March and ten from April to September. A congenital disease would hardly show a seasonal incidence like this. No doubt there are large and small meatuses as there are large and small noses, but it is not necessary to describe this difference as a congenital disease, especially as the condition responds to the same treatment as does the ammoniacal napkin rash. Since perusing the literature I have found that Brennemann (1921) has come to the same conclusion as to the origin of the meatal ulcer.

Although this condition seems confined to the circumcised, many children with long redundant prepuces suffer from a similar dermatitis venenata, which may proceed to ulceration on the foreskin itself.

Treatment

As the condition is self-limited many forms of treatment are claimed to be successful. Internally alkalis are recommended by Pritchard (1938), and barley-water is given by most mothers and nurses. Locally tannic acid in alcohol, picric acid, and various antiseptic ointments have been prescribed.

Cooke (1921, 1926) recommends soaking the napkins in 1 in 4,000 perchloride of mercury to discourage the growth of the urea-splitting organisms. Although this treatment is satisfactory if used by the more intelligent mothers, one hesitates to recommend it to the average mother seen in a clinic, not only because of the poisonous nature of the antiseptic but also because of the difficulty in ensuring that the concentration is correct. Some authorities recommend soaking the napkins in boric acid solution, but I have not found this to be very satisfactory. Once the rash has developed it can be treated simply and effectively by dispensing with the night napkin, and using in its place a piece of boric lint, cut to the right size and discarded in the morning. Apparently the boric acid both neutralizes the ammonia and inhibits the growth of the bacteria. A similar procedure will cure the meatal ulcer.

This treatment is obviously too expensive for routine prophylaxis, which, apart from impressing on her the elements of napkin hygiene, must remain an unsolved problem for the poorer-class mother.

Summary

The condition known as scurvy head is shown to consist of two distinct clinical entities, milk crust and pityriasis capitis, although these two conditions are often combined. The treatment is indicated.

The napkin rash due to irritation by ammonia is discussed. The main features in its aetiology, such as age, seasonal, social, and nocturnal incidence, are discussed. Meatal ulcer of the glans penis is considered as a branch of this disease. The treatment is briefly indicated.

The work for this paper was done in the infant welfare centres of Ilford. For this opportunity I wish to make my acknowledgment to Dr. A. H. G. Burton.

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A STITCH FOR USE IN THE HARRIS PROSTATECTOMY

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The stitch here described is one which I use in the Harris prostatectomy for bringing down the posterior edge of the mucosa of the bladder to the urethral mucosa in the reconstructive stage of the operation. It is not an original stitch in itself, but I think its application to this purpose is original. Those who have seen the stitch in

FIG. 1.—Needle entered behind centre of posterior mucosal edge.

FIG. 2.—Stitch tied, giving a loop and two free ends.

operation have been much impressed with the way it fulfils its purpose. The stitch is that used in the operation of amputation of the uterine cervix, and is well illustrated and described in Chapter VII of Berkeley and Bonney's *Textbook of Gynaecological Surgery*; in fact, it was while carrying out that operation that it occurred to me the stitch might prove ideal in prostatectomy.

After the prostate has been shelled out and the self-retaining retractor arranged satisfactorily it is of the greatest help to use a Morson's anterior retractor with speculum, so as to obtain good exposure of the prostatic