3. In the majority of persistent occipito-posterior cases there are clear indications at an early stage of labour that this complication is likely to occur. It would appear reasonable, therefore, where such warning signs exist, to anticipate the difficulty associated with backward rotation by correction of the mal-position at or near the commencement of the second stage of labour—that is, before the head becomes firmly embedded in the tissues of the pelvic floor. Such intervention is called for in not more than approximately 10 per cent. of all occipito-posterior cases, and is warranted only when a diagnosis of faulty flexion can be

made with certainty. In these, however, the avoidance of needless suffering and of the difficulties and dangers incident to the management of the impacted mal-rotated head seems to justify a departure from the policy of conservatism otherwise so generally applicable.

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GLANDULAR FEVER.

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When glandular fever develops in its characteristic clinical form it is easily recognized by its epidemic character, its tendency to affect children and young adults, its sudden

In the present epidemic we have seen twelve cases of glandular fever, and through the courtesy of our colleagues we have notes of several others. Although the main facts of glandular fever are adequately described in current textbooks, and have lately been concisely put together by Dr. Tidy,⁵ we have been impressed by the difficulties which may be experienced in making a diagnosis in the absence of a differential blood count, and particularly with the similarity to paratyphoid infections which some cases show.

Description of an Illustrative Case.

A female, aged 38 (patient seen with Dr. F. B. Hobbs). The onset was sudden on March 25th, with aching pains in the head, neck, and back, symptoms of slight respiratory catarrh, and, in

Dr. A. J. Williamson). A fall of temperature towards the end of the second week with a subsequent rise about the eighteenth day has been observed in three cases; this fall of temperature requires notice, because it may give the impression of recovery, which is falsified by the subsequent rise of temperature and renewed swelling of the glands (Chart 3, the case of a girl, aged 19, seen with Dr. R. J. Knight). The pulse has been somewhat slow in relation to the fever; its frequency is 84 to 86, and it remains much the same in spite of the marked variations of morning and evening temperature. Thus in one case the pulse frequency was 88, with a temperature of 103.8° F.; it is a little sudden in its rise, full, and easily compressible, and these features persist during at least the early stages of convalescence, when the temperature has returned to normal. The respiration rate is 20 to 24. There is a little upper respiratory tract catarrh and an occasional rhonchus in some cases. There is a little overaction of the heart, a blurring of its sounds, and a slight increase of its size as determined by percussion. The urine often contains a trace of albumin.

The glandular enlargement generally appears early in the disease, but in some of our cases it has not occurred until late, or it has been so slight as to escape notice; thus in 6 cases no glandular enlargement was noted until the tenth, fourteenth (2 cases), seventeenth, eighteenth, and nineteenth day of the disease. The cervical lymphatic glands are most frequently enlarged, those on the left side more than those on the right, and quite characteristically a single circular, rather than oval, gland in the left

CHART 3.

posterior triangle behind the sterno-mastoid in about the middle of its length. The lymph gland enlargement may be very general, or only single groups of superficial glands may be affected. The glands are discrete, firm, and elastic; they are not painful, but some of the swollen glands are tender on pressure; they somewhat resemble lymphadenoma to feel, but are less tense. The pain in the neck may indicate affection of the deep cervical glands; an irritating or paroxysmal cough may indicate pressure on the bronchi by swollen glands. It was interesting that in one case the diagnosis of enlargement of the mediastinal glands had been made simply on the physical signs of slight increase of the paravertebral dullness and slight obstruction to the right bronchus at a time when the diagnosis of glandular fever had not occurred. Enlarged mesenteric glands have not been palpable, but the abdominal distention has suggested their involvement in some cases.

There is no typical rash in glandular fever. Various rashes are described. In one of our cases a macular rash appeared for twenty-four hours on the fourth day; in two cases there was an urticarial rash; in five cases we have seen a papular rash of which the spots closely resemble those of typhoid fever. These spots differ from rose spots in being somewhat darker in colour and more easily palpable; they have been seen to appear as early as the fourth day and as late as the fourteenth; they may be widely scattered as in typhoid, and three or four spots on the face and a few on the upper arms and thighs and one or two below the knees have been seen in three cases; they are chiefly distributed over the trunk, and more on the front than on the back; they leave a tiny brown stain, which is present for a few days after the papular rash has disappeared.

The enlargement of the spleen is inconspicuous. At best it is easily felt a fingerbreadth below the costal margin on inspiration, in other cases it is hardly palpable,

or its enlargement may only be made out by percussion. The liver may be slightly enlarged.

The blood picture is the most characteristic feature of the disease. In our cases the highest white cell count was 22,400, of which 14,400 were mononuclear cells. This was the only case with an increase of polymorphonuclear cells (3,000). The mononuclear increase in this epidemic has been in the form of lymphocytic increase, but in other cases we have seen there has been a striking increase in a variety of immature forms resembling large mononuclear cells with a big, rather pale nucleus, oval, circular, or slightly reniform, and a large amount of pale protoplasm surrounding it, in which are a few azure granules. The polymorphonuclear cells have been normal in numbers, or reduced to 2,500, 2,900, 3,100, and in one case to 1,200. The red blood corpuscles and haemoglobin are normal.

Differential Diagnosis.

It is obvious, from the foregoing description of cases we have seen in the present epidemic, that the difficulty of distinguishing glandular fever from the enteric group of infections may be considerable. The points of similarity shown by some cases are the persistent fever with few physical signs, the relatively slow pulse frequency in proportion to the temperature and the character of the pulse itself, the furred tongue, abdominal distention and tendency to constipation, the enlargement of the spleen, and papular eruption; occasionally epistaxis and respiratory catarrh increase the similarity of the two diseases. Though the onset of the enteric group of infections is typically insidious it is sometimes sudden, especially in paratyphoid fever. The onset of glandular fever with headache, slight shivering, giddiness, and malaise closely resembles paratyphoid fever with sudden onset. The course of the two diseases may also be alike. Thus, though the characteristic temperature of glandular fever seems to be remittent, we have one chart in which it was continuous during the second week; a remittent type of fever is, of course, characteristic of typhoid and paratyphoid fever during defervescence.

The chief points in which glandular fever differs from enteric infections are the lack of constitutional disturbance in glandular fever (apart from the malaise at its onset and the malaise accompanying the evening rise of temperature), the enlargement of the superficial lymph glands, the tendency to sweats, and the lymphocytosis. The negative points are the negative Widal reaction and blood culture.

No one of these diagnostic criteria has absolute value, for, though we have not seen a case of glandular fever in which there is no glandular enlargement, it would seem from the experience of others that this may possibly occur. In some of the cases of glandular fever reported by Tidy and Daniel² there was no absolute lymphocytosis at some stage of the disease; and, on the other hand, it is known that infections of the enteric group do not always give a positive Widal reaction as usually performed. When, in addition to this, it is realized that some authors³ doubt the presence of a rash in glandular fever it may be open to question whether the cases with a roseolar eruption which we have described as glandular fever really belong to that clinical entity. While hesitating to make a dogmatic assertion on this matter, we think that there is good reason to include our cases under the name of glandular fever because of the glandular swelling and absolute lymphocytosis. The other common conditions in which lymphocytosis occurs—namely, leukaemia, whooping-cough, undulant fever, and some forms of tuberculosis and syphilis—have been excluded in our cases. Lastly, the presence of roseolar eruption has previously been described in glandular fever; Longcope gives a record of one case; Glanzmann reports another case observed by Königsberger, and also one seen by himself.

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