pepsin after the histamine. Dr. Price-Jones, who kindly examined blood films, stated that they still showed traces of anaemia; there were anaemic red cells (quite a number), some achromic and many hypochromic; the mean diameter was on the small side, and there was a trace of microcytosis. The Price-Jones curve had the look of a normal curve, but the variability was too high.

2. The second case was that of a sausage maker, aged 34, who came under observation in September, 1932, with a history of having been subject to recurrent diarrhoeal attacks for the past ten or eleven years. Fractional examination of the gastric contents showed complete achlorhydria, even after subcutaneous injection of histamine, but pepsin was present. Brachial blood pressure: 120/75 mm. Hg. Negative Wassermann reaction. Though the patient looked somewhat pale, his blood showed hardly any anaemia, and he was treated only by hydrochloric acid and pepsin with his meals, and by *carbo animalis* when he had diarrhoea.

On October 21st, 1933, he said that he still tended to have loose motions and "dared not eat raw fruit" for fear of inducing a regular attack of diarrhoea. Blood count: haemoglobin, 81 per cent.; erythrocytes, 4,320,000; colour index 0.94; leucocytes, 4,800 per c.mm. (eosinophils 1 per cent., polymorphonuclears 70 per cent., lymphocytes 19 per cent., monocytes 10 per cent.). Dr. Price-Jones examined blood films in February, 1933, and wrote that there were a very few anaemic red cells scattered through the films, but too few to estimate; the mean diameter of the red cells was on the low side of normal mean; there was no microcytosis, and the variability of the distribution was also quite healthy. This case should perhaps be called one of achlorhydria rather than one of achlorhydic anaemia, but for a man the blood count really shows slight anaemia. We have recently seen two young women, aged 21 and 18 respectively, without decided anaemia though one showed complete achlorhydria and the other complete achylia.

3. An instructor of boxing, swimming, and cricket, aged 64, came under observation in May, 1933, for cutaneous pruritus in upper limbs and back. He was a well-built, slightly anaemic man. Blood count: haemoglobin, 55 per cent.; erythrocytes, 4,200,000; colour index, 0.65; leucocytes, 3,600 per c.mm. Fractional examination of the gastric contents showed complete achlorhydria, even after subcutaneous injection of histamine; a little pepsin present after the histamine. Brachial blood pressure: 165/90 mm. Hg. Negative Wassermann reaction. Otherwise nothing special. Fasting blood sugar: 0.095 per cent. He was treated with *ferrum reductum* and with hydrochloric acid and pepsin after meals. In July, 1933, his blood count was: haemoglobin, 71 per cent.; erythrocytes, 4,680,000; colour index, 0.76; leucocytes, 7,300 per c.mm. (eosinophils 5 per cent., polymorphonuclears 53 per cent., lymphocytes 33 per cent., monocytes 9 per cent.). No ova of intestinal worms were found in the faeces. A certain amount of pruritus still remains.

4. A commercial traveller and collector, aged 32, came under observation in December, 1932, with the history of looking pale for a long while and having had dyspeptic troubles for the previous four months. For some time he had had a sore tongue, which the dentist told him was not due to his teeth. In 1931 he had double pneumonia, and (at another hospital) was given two blood transfusions. Blood count (December, 1932): haemoglobin, 38 per cent.; erythrocytes, 2,400,000; colour index, 0.8; leucocytes, 5,750 per c.mm. (polymorphonuclears 77 per cent., lymphocytes 20 per cent., monocytes 3 per cent.); anisocytosis, poikilocytosis, and a little basophilia punctata. Fractional examination of the gastric contents showed complete achlorhydria, even after the subcutaneous injection of histamine; pepsin present after the histamine. Brachial systolic blood pressure: 115/45 mm. Hg. Negative Wassermann reaction. Vitiligo. In February, 1933, the spleen could be felt during inspiration.

The presence of achlorhydria was confirmed in January and July, 1933. In July no enlargement of the spleen could be detected, and the blood count gave: haemoglobin, 75 per cent.; erythrocytes, 5,000,000; colour index, 0.75; leucocytes, 6,950 per c.mm. (eosinophils 2 per cent., polymorphonuclears 62 per cent., lymphocytes 29 per cent., monocytes 7 per cent.); very slight anisocytosis and poikilocytosis. The out-patient treatment, doubtless somewhat irregularly taken, had been *ferrum reductum* and an acid pepsin mixture

with meals. We have included this case, though Dr. Price-Jones, who examined blood films of December, 1932, and February, 1933, wrote that the extreme degree of poikilocytosis did not suggest simple microcytic anaemia.

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SEASONAL INCIDENCE OF ECLAMPSIA IN HONG-KONG

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It is generally believed that the incidence of eclampsia is affected by climatic changes—for example, Tweedy¹ states that the disease is more common (in Ireland) when the weather is cold and damp, but that it occurs in hot countries more frequently than in countries with a temperate climate. He suggests that this may be connected with an insufficient consumption of water by the patient. It is exceedingly difficult to say how frequently any disease occurs among the Chinese. I know that a search of the more reliable hospital records in this colony has only yielded the histories of ninety-seven cases of eclampsia extending over an average period of, say, six years, the total population being upwards of a million. There have probably been many more cases during this period which have never found their way to any hospital.

It occurred to me that it might be of interest to compare the actual incidence of eclampsia and severe albuminuria in the different months of the year, Hong-Kong being a semi-tropical place, which has very definite seasonal changes. Unfortunately our cases are too few to warrant any sweeping deductions being made, but their publication may perhaps be of interest for comparison with statistics of the incidence of the disease in other parts of the world.

The climate of Hong-Kong may be described as semi-tropical; the winter is cool and dry, and the summer is hot and very damp. Officers of the Army and other much-travelled people tell us that the summer climate is unusually enervating, even for a tropical country. Although the temperature itself is never excessively high, the average humidity is very great. To go into further detail, we find that the months of January and February are more or less cold, the sky is frequently overcast, but there is little rain. Some time late in March a change occurs; the wind, which in winter usually blows from the north-east, turns to the south, or south-west, the temperature rises, the air becomes damp, and there are frequent showers. The weather does not become definitely hot until about the first week in May, and from then until the middle of September the hot and damp weather lasts. Throughout this time the rain comes at irregular intervals, usually associated with the proximity of a typhoon. About the middle of September a change is again noticeable, the wind, having been more or less southerly all the summer, tends to change to the north-east again. During the months of October, November, and December there is almost constant sunshine, the air becomes dry, and the temperature falls as Christmas approaches. The times at which seasonal

variations occur may be illustrated by a comparison of the following mean temperatures and rainfalls:

	Mean Temperature	Rainfall	Humidity
March ...	63.1°	2.8 in.	83%
May ...	76.9°	11.9 in.	84%
August ...	81.6°	14.5 in.	84%
October ...	76.2°	4.8 in.	72%

The following table gives the average temperature, rainfall, and humidity in each month of the year, and the number of cases of eclampsia and severe albuminuria (other than eclampsia) which have occurred in each month.

Month	Mean Temperature	Total Rainfall	Mean Relative Humidity	Total Number of Cases	
				Eclampsia	Marked Albuminuria No Fits
January ...	59.9	Inches 1.315	Per cent. 75	11	6
February ...	58.8	1.804	78	10	4
March ...	63.1	2.833	83	3	—
April ...	70.2	5.556	85	4	—
May ...	76.9	11.954	84	9	1
June ...	80.9	15.443	83	6	3
July ...	82.0	14.595	83	6	6
August ...	81.6	14.519	84	3	6
September ...	80.6	9.714	78	11	6
October ...	76.2	4.835	72	10	1
November ...	69.3	1.733	63	10	5
December ...	62.9	1.013	69	14	3
Year ...	71.9	85.380	79	97	41

It will be seen that out of the ninety-seven cases of eclampsia sixty-six occurred during the months of September to February inclusive, as against thirty-one in the period March to August. Although our cases are far too few to prove that this is the true seasonal incidence of the disease in Hong-Kong it may be of interest to examine the table and to endeavour to find out if there are any suggestive factors which might exert an influence. The following points may be noted:

1. During the period September 1st to February 28th the humidity is lowest—that is, it is always below 80 per cent., whereas in the period March 1st to August 31st it is constantly over 80 per cent.

2. The period September to February includes the three coldest months of the year (December, January, and February); in the other period we have the three hottest months.

3. The months June, July, and August have the heaviest rainfall.

4. If the month of March be compared with February, and September with August, it will be seen that in March the temperature, rainfall, and humidity are higher than in February, but that the incidence of eclampsia in our series is lower. In September there is a drop of 1° in temperature, and nearly five inches less rainfall than in August; the humidity is reduced by 6 per cent., and, lastly, there is a marked increase in the number of eclamptic cases recorded.

The cases of marked albuminuria (without fits) have been taken from our own clinic; the condition is perhaps more common in the hot weather.

I wish to acknowledge any indebtedness to Mr. Claxton, lately director of the Royal Observatory, Hong-Kong, and to Dr. Chan, Dr. Lam, Dr. Bau, Dr. Ruttonjee, and Dr. Cheng for their kindness and help in obtaining particulars of cases at the Tung Wah (Eastern and Western), Kwong Wah, and Wanchi Hospitals.

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Memoranda

MEDICAL, SURGICAL, OBSTETRICAL

CERVICAL RIB WITH SYMPTOMS DUE TO DROPPING OF THE SHOULDER CAUSED BY AN OBLITERATIVE PLEURISY

Radiology has shown the frequency with which cervical ribs occur, and clinical evidence shows that only 5 to 10 per cent. of them ever give rise to symptoms of any sort. From the x-ray shadows it is impossible to tell which cervical ribs are likely to cause symptoms and which are likely to remain silent, and the development of symptoms in a small percentage of cases has had many explanations, the common basis of which has been dropping of the shoulder due to strain or trauma.

Dr. Hurst, in a personal communication, told me that during the war he saw several cases develop as the result of handling a rifle, and he quoted a case of Sir Farquhar Buzzard's which was caused by the wearing of a heavy fur coat. Steindler¹ states that the twisting of the arm, the

pressure of a rifle, the wearing of a pack, or the excessive use of the arms may all cause symptoms in these cases, and that, quite frequently, the first symptoms appear during periods of ill-health, anaemia, or general debility where there is muscular weakness.

Other explanations, dependent on the time of ossification of the transverse processes and the growth of the rib at puberty, have been mentioned by Babcock² and Grisson,³ but most authorities are agreed that the development of symptoms is most frequently due, not to any growth in size of the cervical ribs, but to drooping of the shoulder and consequent traction on the cervical roots, so that a compression neuritis results from pressure against the rib, against the fibrous band between the accessory rib and the first rib, or against the scalenus anticus.

The dropping of the shoulders in these cases is very often merely an implication from the history, and where it is bilateral direct evidence may be difficult to obtain; also, since drooping of the shoulders and a bad stance are so common among the general population, the evidence for this factor as the cause of symptoms is not clear-cut. The case I am about to describe appears to me to make the evidence more clear.

CASE HISTORY

A woman, aged 31, developed pulmonary tuberculosis in 1931. The disease was unilateral and left-sided, and artificial pneumothorax was performed, which was kept up for four months until the patient developed a large pleural effusion: