because corticosteroid treatment has, for some reason, been omitted, or because the dose has not been sufficiently increased during an intercurrent illness. It can also arise during an attempted withdrawal of glucocorticoid therapy. The clinical features are those of glucocorticoid deficiency, and treatment is with high doses of cortisol, which usually have to be given parenterally.

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Second Opinion, Please

Asthma and a Lump in the Breast

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Mrs. C. D. Date of Birth 25 June 1929

Entries on Medical Record Card E.C.8

7 January 1969: Mild cough. Non-productive. 10 days. Benylin Expect.
15 January: No improvement. Worse at night. Slight dyspnoea during day. Tabs. Franol.
29 January: Spasmodic attacks of coughing. No sputum. *O.E.* scattered wheezy rhonchi. Diagnosis bronchospasm. Syrup Ventolin.
13 February: Insomnia through attacks of spasmodic coughing and wheezing. Asthma?
For Hb, E.S.R., and urine examinations, please sister.

Conversation Between Partners (14 February)

C.H.G.: John, would you have a look at Mrs. C.D. I can't make her out, I have been treating her for five or six weeks for a spasmodic cough and I think she is developing asthma.
J.W.S.: How old is she, Charles?
C.H.G.: Forty-two. You will see from the thinness of her record card she has rarely seen us. She had one child about 14 years ago, but that was stillborn.
J.W.S.: It is a bit unusual to develop asthma this late in life. Are there any precipitating factors?
C.H.G.: What do you mean?
J.W.S.: Infection, allergy, any stress in the family. Is she a worrying type of person?
C.H.G.: No, she is rather a neat, tidy, good looking woman with a very good husband. By the way, I have asked sister to do some routine tests.

Entries on Medical Record Card E.C.8

16 February: Hb. 78%; E.S.R. 42 mm in the first hour; urine N.A.D.
20 February: Charles, I can find very little wrong here and confirm all your findings. There must be an allergic factor. She tells me she acquired a budgerigar in December. I have asked sister to do Bencard skin testing.
21 February: Skin tests; all negative except feathers.
In view of the above I suggest specific desensitization—J.W.S.

Tamworth, Staffs
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Conversation Between Partners

J.W.S.: By the way, Charles, did you start Mrs. C.D. on a desensitization course against her budgerigar?
C.H.G.: No. I don't really think that is the answer. She is now producing yellow sputum and I have put her on tetracycline for two weeks, and she seems a great deal better.
J.W.S.: You know, I think you ought to have another *x*-ray and an E.C.G. done.
C.H.G.: Very well, but all these investigations are a bit beyond me. I'm rather old-fashioned. Actually, a mass radiography survey was done in November on her and that was negative.

Entries on Medical Record Card E.C.8

23 March: *X*-ray chest: no gross pulmonary lesion. Slight increase in hilar shadow and some peribronchial opacity.
E.C.G.: normal except for increase in QRS complex in lead 2.
15 April: Night visit. Asthma attack. i.v aminophylline 5 ml.
2 May: Evening call. Bronchospasm. Tabs. Amesec.
3 May: Call by sister; much improved.
4 May: Charles, I suggest putting this patient on prednisolone 5 mg t.d.s. It's worth the risk. I should reduce the dosage slowly but increase it if she gets an intercurrent infection. I suggest also putting the budgerigar in the front room.—J.W.S.

From Laurel House, Tamworth, to Practice Health Visitor (4 July)

Would you be good enough to pop in and see Mrs. C.D. She has had some kind of asthma for the past five months, and I was called out once again at 10 p.m. Last night she was wheezing terribly when I got there and the whole family were in a state of excitement. I noticed that as I sat down and talked she gradually got easier, although maintaining she felt terrible. I spent some time inquiring about causes of stress—that is, husband troubles, work, or neighbours—but her sister indignantly told me that I should be ashamed of myself for suggesting all was not harmonious in the home. She assures me they have never had any trouble in their married life.

From Practice Health Visitor to Laurel House, Tamworth (5 July)

I went in to see Mrs. C.D. as you asked and there certainly does not seem to be any family troubles whatsoever, and it

is a beautifully kept house. She did, however, tell me she was worried about a small lump she has noticed in her right breast, but she says that as it is painless it cannot be important. I have advised her to see you at the earliest possible moment.

Laurel House, Tamworth (6 July)

Dear Frank,

Thank you for seeing Mrs. C.D. She first noticed a tiny lump in her breast in January and has been keeping quiet about it ever since; it is about the size of a small chestnut and not adherent to the skin, but I can feel it with the flat of my hand. There are no axillary glands and she has had no marked loss of weight although her Hb remains a persistent 11·2, with an E.S.R. of 45 mm.

I am sure you will share my anxiety about the pathology of this lump and I suppose in view of her age the possibility of ablation might arise. I understand that there is a new field of investigation arising out of the Guernsey experiment. What do you think?

St. Editha's Hospital, Tamworth, Staffs (13 July)

Dear John,

Thank you for sending this patient to see me. I share your anxiety regarding Mrs. C.D.'s lump in the breast. It has not got the smooth hard feel of a cyst and in consequence I have not put a needle in it. On the other hand, as you say, it is easily felt with the flat of the hand, and I think therefore mammography would be somewhat academic. I am sure early excision biopsy is indicated with arrangements for a frozen section if required. I have told Mrs C.D. that if the lump is found to be mischievous we would like to proceed under the same anaesthetic to total simple mastectomy and axillary clearance. As you know, I have abandoned radical mastectomy as, though the long-term results with this operation are marginally better, I am not satisfied that the increased disfigurement and weakened shoulder justify the radical operation.

The raised E.S.R. may be due to her past chest trouble but prior to admission I will get a skeletal survey and bone scan done in case we are dealing already with disseminated disease. That brings me to the question of oophorectomy. Unless investigation shows evidence of dissemination I shall not advise this procedure at the moment. About a quarter of cases with disseminated disease derive some benefit from oophorectomy, but as a prophylactic procedure evidence for its value is lacking.

The Guernsey experiment is yet one more example of the effort to identify a minority group more susceptible to a given disease so that they can be given special surveillance. In this instance it is based upon the hypothesis that women excreting abnormal amounts of aetiocholanolone and 17 OHCS in the urine are more prone to develop cancer of the breast. At the present we have no facilities for this examination.

Laurel House, Tamworth (20 July)

Dear Frank,

This lady has been in to see me understandably distressed. I gather you are going to take out the tumour for frozen section and of course may go on to mastectomy.

She has been reading a popular women's magazine on this subject that recorded that it is possible to put a prosthesis in place of the breast. She is as you may have noticed quite a presentable woman who is a little preoccupied with her appearance. She asked me if this could be done. I gave a very guarded reply, never having heard of it. I should be interested to hear your thoughts.

St. Editha's Hospital, Tamworth, Staffs (27 July)

Dear John,

Thank you for your further letter about this lady. In trying to persuade her to accept my advice you might explain one thing to her that I omitted to mention when I saw her. If we find the lesion to be malignant she need have no anxieties regarding the operation of mastectomy itself. The disease is dangerous but not the operation. Apart from a very extended operation which some surgeons practise in the States, there is virtually no operative mortality attendant upon ablative breast surgery.

I share your reservations regarding immediate insertion of prostheses in surgery for cancer of the breast. Shortage of skin not infrequently calling for immediate split skin grafting is commonplace in this condition. I should need a very large breast with a very small primary before considering immediate insertion of a prosthesis.

St. Editha's Hospital, Tamworth, Staffs (16 August)

Dear John,

As you know, excision biopsy revealed a lump which cut like an unripe pear. I felt sufficiently sure of a malignant diagnosis to re-scrub and begin mastectomy and axillary clearance before confirmation of malignancy by frozen section reached me.

The histological report gives us little guide as to prognosis. As is so often the case with breast tumours our pathologist finds a variable pattern of malignancy in different areas of the growth: well-differentiated at one site but showing many mitotic figures and undifferentiated cells at other sites. However, examination of all the axillary nodes showed no evidence of invasion. It would seem therefore that Mrs. C.D. has a definite Stage 1 carcinoma of breast, with in consequence about an 80% chance of a five-year survival. I am not referring her for radiotherapy forthwith, but we will hold this in reserve against possible local recurrence. We shall need to see her regularly in the follow-up clinic and in the event of dissemination occurring I think in a woman of this age the first step would be oophorectomy.

Conversation between Health Visitor and Partners (20 September)

H.V.: I visited Mrs. C.D. yesterday after her operation; she is very well and the wound has healed beautifully.

J.W.S.: Well, according to the authorities she is in the very best age group for a five-year survival from a Stage One carcinoma. I think our job now with the husband is to help her over the mourning period following the loss of her breast. By the way, how is the asthma?

H.V.: She gave the budgerigar to a friend while in hospital and since she came home she has been completely free of any cough.

C.H.G.: It is interesting to speculate why this particular woman chose to present her trouble in this way; perhaps the psychiatrists could tell us?

J.W.S.: There is a lesson for us all here. We all know that asthma has three components—infection, allergy, and psyche—but while paying lip service to the aspects of stress we often don't take it any further.

C.H.G.: Well, I don't think we can cure these conditions by psychological methods . . . but we can always listen carefully to what the patient is telling us and asking for . . . this woman was pleading for someone to look at her body.

Glossary

Benylin expectorant	Containing diphenhydramine hydrochloride.
Franol	Containing ephedrine hydrochloride.
O.E.	On examination.
Ventolin syrup	Containing salbutamol.
Hb	Haemoglobin.
E.S.R.	Erythrocyte sedimentation rate.
N.A.D.	Nil abnormal diagnosed.
I.V.	Intravenous.
Amesec	Containing aminophylline.
OHCS	Hydroxycorticosteroids.