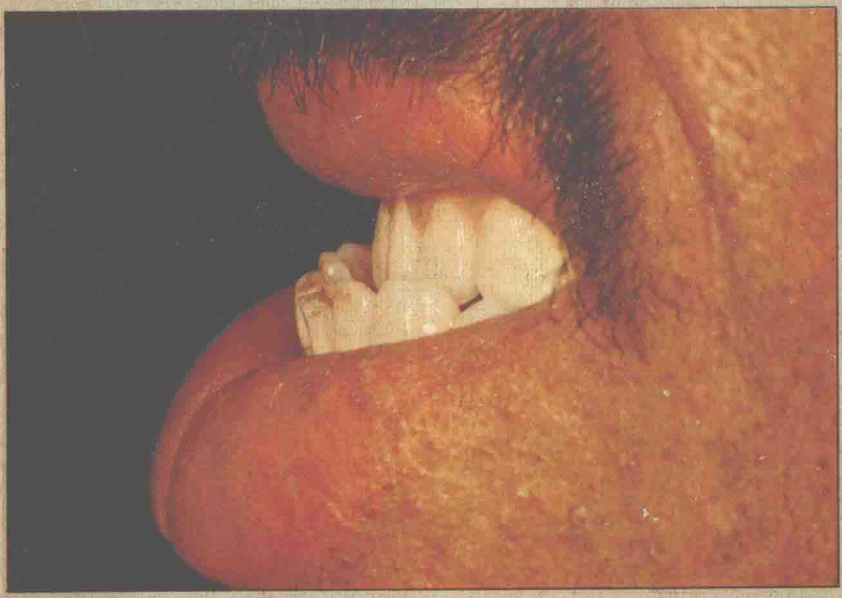
YEAR BOOK *Color Atlas Series*

COLOR ATLAS OF Physical Signs in General Medicine

M. ZATOUROFF



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(Volumes 1 and 2: Volumes 3-6 in preparation)
Color atlas of Periodontology

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To Diana, Anna, Justin and Catherine
without whose forbearance this book
would never have been finished

Introduction

General medicine overlaps into many different specialities: the aim of this book is to cover ground which is relevant and important to all specialities, though aspects which are essentially general surgery have been omitted. The photographs show the appearance of a physical sign at the bedside and cover the minimal as well as the gross entity, so that the full spectrum can be appreciated. In some sections several pictures of the same condition are provided, so that the characteristic 'face' of the disease can be recognised.

The clinical undergraduate will be able to study a wide selection of short cases and a number of very common conditions are included. The postgraduate requires a different approach: some of the photographs suggest an 'approach to seeing' and a train of logical thought and correlation rather than spot diagnosis. For both the undergraduate and the postgraduate the illustrations provide useful comparisons with the colour slides which are used more and more in examinations.

A section on folk medicine and customs amongst different races is also included. This serves to bring to the student's attention the diagnostic significance of certain burns, scars and stains.

The format of the book follows the head-to-foot sequence of physical examination. This means that some pictures which relate to a certain condition may be spread throughout the book. The captions begin with the diagnosis, describe the picture in order to heighten attention and bring out detail, and the student can then adopt this approach when he sees an abnormality which he does not recognise. Where it seemed relevant, causes, differential diagnoses and additional points to look for have been mentioned.

The photographs were taken either at the bedside, or in the consulting room, using Kodachrome 11 film, and occasionally High Speed Ektachrome. The cameras were a Pentax and a Leicaflex with 60mm macro and 135mm lenses with close-up attachments. Electronic flash was used for most pictures, although the African photographs were taken in available light at an aperture of *f*1.8 and so have a very shallow depth of field. The patients, from West African to Arabian, Mediterranean and Anglo Saxon, represent a multi-racial collection, typical of general medicine.

The Approach to Photographs and Slides

Many examinations now use photographs and colour slides in order to test the knowledge of the student. Some practical approach is necessary since intuitive guessing is often wrong.

When you look at a photograph for the first time, always reconsider the first thing that comes to your mind and test it against logical deduction: if it appears wrong do not discard it totally, often the first thought *is* right! If you cannot identify the signs, either in a picture or in life, observe carefully and describe logically what you see. As you do this the story unfolds and when you reach the end you may realise that you have described the diagnosis.

The approach varies with experience. The undergraduate is happy with the diagnosis of the physical sign: *'clubbing'* for instance. The postgraduate should go further: if cyanosis is present, then *'clubbing in cyanotic congenital heart disease'*; if the fingers are heavily stained with nicotine, then *'clubbing in carcinoma of the bronchus'*. He sees another sign and relates the two together.

The first step is to describe accurately in simple words what is seen. Care is necessary to avoid using powerful, diagnostically emotive words in the description since it is then difficult to change your mind – for instance if a rash is described as butterfly it is extremely unlikely that anything other than the diagnosis of lupus erythematosus will finally emerge. The second point is that whilst describing what you see often the description will suddenly mean something and the diagnosis will come from the depths of your mind. Thirdly, once the diagnosis is established it is important not to describe what you do not see, but which does occur in the condition, in the mistaken belief that such display of knowledge will impress the examiner. It is useless to point out an enophthalmos in a case of Horner's syndrome (**267**) when it does not exist. Similarly it is difficult to see a difference in sweating or a change in temperature on an ordinary colour photograph.

When looking at a rash it should be described in simple terms, macular, papular, vesicular, or pustular and its distribution confirmed by thoughtful search. It is *not* localised if there are spots in another portion of the anatomy but *maximal* at that site (**740**).

Finally if there are two physical signs present they should be taken *separately,* the causes of each sign run over mentally, and where the

causes coincide will be a logical suggestion for the diagnosis. This will reassure the examiner that the candidate thinks clearly, e.g.

(1) **266**: Horner's syndrome and trophic fingers. Horner's syndrome is due to a lesion of the cervical sympathetic chain anywhere in its course. if another sign suggests the level that will pinpoint the diagnosis, then:

(1) could be – burns = syringo myelia
(2) Raynaud's phenomenon = treated by sympathectomy
(3) emboli = cervical rib

Only the first two relate to the Horner's syndrome (*syn.* Bernard-Horner syndrome) and are possible diagnoses.

(2) **277**: Hyperextension of the hip, which could be due to laxity, hypermobility or hypertonicity. The cause may be:

(1) genetic – pseudoxanthoma elasticum and Ehlers Danlos syndrome
(2) occupational – in the ballet dancer or acrobat
(3) environmental in the Arab accustomed to sit cross-legged
(4) neurological due to hypotonicity
(5) anatomical due to joint destruction

But in addition bilateral ptosis is present – congenital, myopathic, myasthenic or tabetic in origin.

Diagnosis: probably tabes dorsalis.

The most important things are to look, describe and think. It is no good looking and expecting to find the diagnosis written on the patient's body, the diagnosis is there, all you have to do is to describe what you see.

(Johann Friedrich Horner, 1831–1886, described 1869; Claude Bernard, 1813–1878, described 1862; Edvard Ehlers, 1863–1937, described 1901; Henri Alexander Danlos, 1844–1912, described 1908.)

The Head

THE FACE

Observation of the facies, the expression, may give information about the patient's state of mind and physical health: mood or haemoglobin, health or disease, malnutrition or endocrine state. Clues are there to the system that is at fault.

1 *Health* Alert, bright-eyed, no pallor and normal skin turgor.

2 *Disease (carcinoma of the pancreas)* Apathetic and drowsy: loss of subcutaneous fat, sunken eyes and cheeks with loss of skin turgor secondary to dehydration. The picture of terminal illness.

3 *Pallor* This is not synonymous with anaemia since a pale skin may be due to depigmentation or vasoconstriction, apart from a fall in the haemoglobin concentration. Pallor of the skin must be confirmed by looking at the mucous membranes. Note: the colour of the skin; a slight malar flush with dilated superficial veins; a left sided corneal arcus; obesity – the roundness of the face which is not due to steroid therapy, but could be; the fact that the hair has been dyed (this is irrelevant but one should learn to observe everything).

In fact this woman's haemoglobin was 14g% and this underlines the fallacy of using pallor as an index of anaemia. (See **4**).

4 *Pallor of the conjunctivae* Note the difference in colour between the examiner's nailbed and the conjunctival mucous membrane – one can be misled since this woman's haemoglobin was 14g%. Confirmation should be sought by examination of other mucous membranes and estimation of their degree of pallor.

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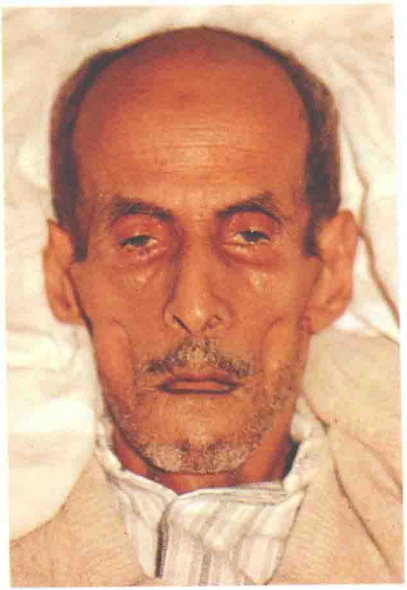

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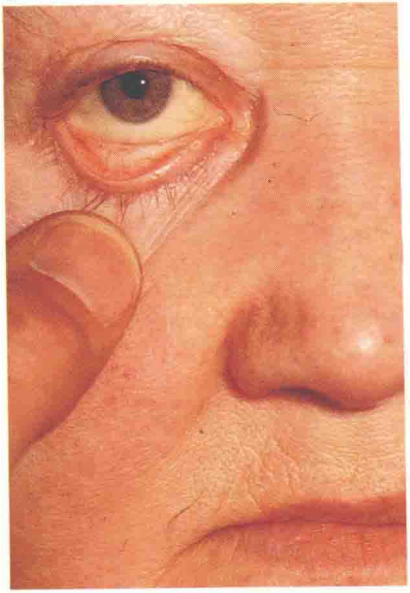

5 *Pallor (pernicious anaemia)* A woman of middle age. The lips and face are pale, the hair white, the eyes blue. Note the pallor of the lower lid margin, the tattoo on the left shoulder. This woman presents the classic clinical picture of the facies of pernicious anaemia.

6 *Pallor (pernicious anaemia)* Facial pallor, blue eyes, grey hair. Bilateral corneal arcus.

7 *Anaemia* This thin, pale woman with a scarred abdomen had a gastrectomy which produced her iron deficiency anaemia. Note the wasting, the abdominal scar and dilated veins which in her case are not significant. Dilated veins should always be observed since they may indicate a venous block in the deep circulation.

8 *Megaloblastic anaemia* Megaloblastic anaemia in the elderly, slight pallor, tinge of jaundice in the eye, atrophy of the tongue and healed angular stomatitis.

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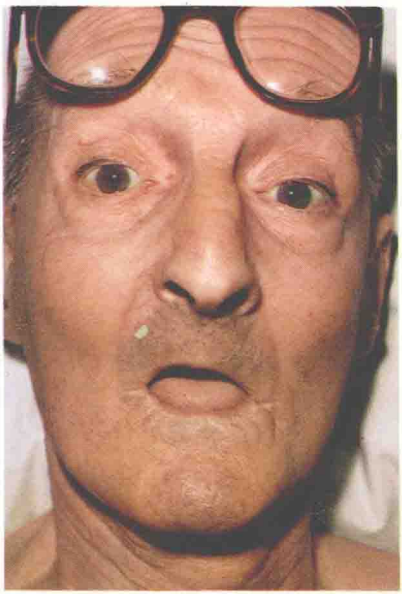

9 *Pallor (rectal bleeding)* Pale lips and face. This man looks ill and apathetic. Haemoglobin 6g%.

Diagnosis: carcinoma of the rectum; long standing diarrhoea secondary to ulcerative colitis. Compare his facies and alertness with the preceding plate where the haemoglobin was 5g% and with the pre and post transfusion appearance of the mucous membrane on the inside of the lower lip (**11** & **12**).

10 *Pallor of the conjunctivae in severe anaemia* The colour of the mucous membrane and the conjunctival sac is an index of the degree of anaemia but it may be reassuringly red in severe anaemia and should be compared with the inside of the lower lip.

11 *Pallor of the mucous membrane of the lower lip* Same patient as **10**, confirming the conjunctival impression of severe anaemia. Note the mild pyorrhoea, gum recession and nicotine staining of the teeth. This is a particularly reliable site to check for pallor and estimate the haemoglobin by contrast with the examiner's nailbed.

12 *Normal mucosa of the lower lip* The same patient, following transfusion of five pints of packed red cells

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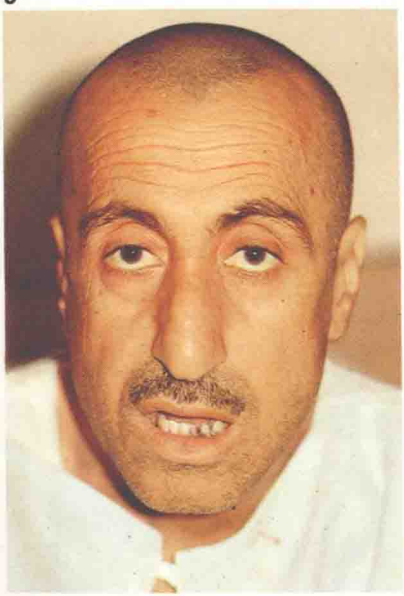

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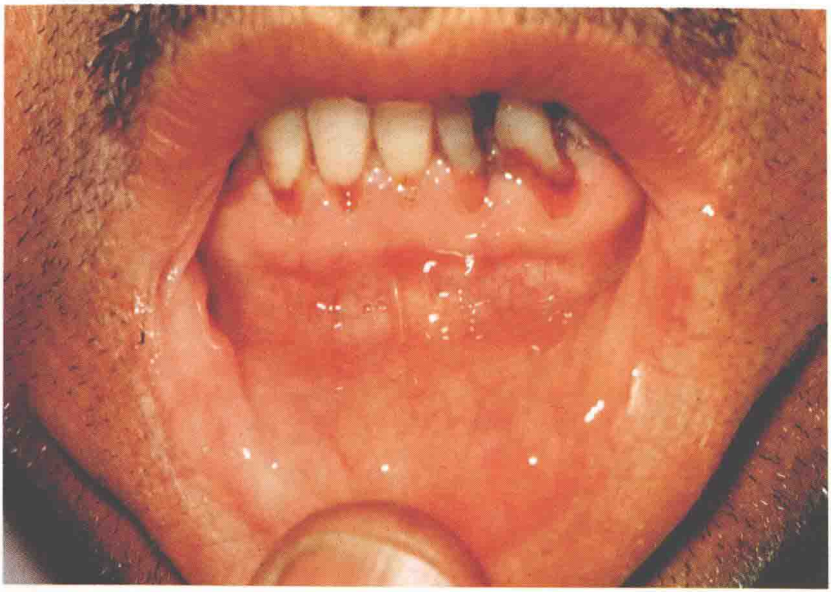

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