more observational studies, and to plan research on topics such as public education and screening in the prevention of cardiovascular disease.

The second recognised defect is the reluctance of German clinicians to set up or participate in formal clinical trials. Again, there are historical reasons: the powerful clinical professors have a tradition of laying down treatment policies by dictat, and many of them have substantial private practices. But a wind of change is blowing, with more trials being organised, especially in oncology and cardiology, though no national field

trials have yet been established in any branch of clinical medicine.

In both cases—epidemiology and clinical trials—the government ministries are encouraging the trends they want to see via the grant-giving bodies. But West Germany shares many of Britain's economic problems, and with cuts and contractions dominating the scene new initiatives are difficult to stimulate. Nevertheless, the stage is set for a rapid expansion of clinical and epidemiological research; whether it materialises will depend on the attitudes of the individuals concerned.

Lesson of the Week

Idiopathic hypoparathyroidism presenting as urinary and faecal incontinence

SANDRA L BAKER

Idiopathic hypoparathyroidism is a rare endocrine disorder and results in hypocalcaemia and hyperphosphataemia. These cause neuromuscular excitability and mental change, which may be the presenting feature. A patient presented with urinary and faecal incontinence which was reversed when his hypoparathyroidism was treated.

Case report

A 72-year-old man was admitted in November 1981 complaining only of slight numbness of fingers and toes. His daughter said that for six weeks he had had urinary incontinence, at first only at night and then day and night, and faecal incontinence. The patient could not control this and had hidden soiled bedding several times. His personality had changed over the preceding two to three months and he showed emotional lability. He was a non-smoker, took little alcohol, and had no dietary idiosyncrasies. On examination he was unkempt and doubly incontinent. He was orientated in time and space, but his emotional responses were inappropriate. He was pale, his nails were dry and brittle, his skin was flaky, but he had no cataracts or cutaneous moniliasis. The abdomen was soft and the bladder palpable; the rectum was empty, and the prostate was a normal size on digital assessment. Chvostek's and Trousseau's signs were strongly positive.

The results of biochemical investigations showed normal concentrations of sodium and potassium; urea 5.1 mmol/l (30 mg/100 ml); creatinine 104 μ mol/l (normal 45-110 μ mol/l; 0.45-1.1 mg/100 ml); urate 0.31 mmol/l (normal 0.25-0.50 mmol/l; 4.2-8.4 mg/100 ml); and normal concentrations of serum proteins, including protein electrophoresis; liver function tests; and cardiac enzymes. The serum calcium concentration was 1.19 mmol/l (normal 2.30-2.7 mmol/l; 9.1-10.7 mg/100 ml); serum phosphate 1.93 mmol/l (normal 0.80-1.40 mmol/l; 2.5-4.3

Since changes in calcium homeostasis affect gastrointestinal motility all patients with urinary and faecal incontinence of recent onset should be investigated

mg/100 ml), with a serum albumin concentration of 38 g/l; alkaline phosphatase 10 KA units/l (normal 7-14 KA units/l); the serum magnesium concentration was low at 0.56 mmol/l (0.7-0.95 mmol/l; 1.65-2.36 mg/100 ml).

The results of hormonal assays showed that parathormone was undetectable on two occasions, calcitonin concentrations were normal at <0.08 μ g/l, and thyroid function tests were normal. Thyroid and parathyroid autoantibodies were not detected in the serum; and a skeletal survey showed normal bone

Response to treatment with cholecalciferol.

Conversion: SI to traditional units—Serum calcium: 1 mmol/l $\approx$ 4 mg/100 ml.

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density. A mid-stream specimen of urine contained no cells and was sterile on culture. Idiopathic hypoparathyroidism was diagnosed and treatment started with cholecalciferol 100 000 IU per day, with supplements of calcium and magnesium. The serum calcium concentration responded to treatment (figure). After three months the dose of cholecalciferol was reduced to 25 000 IU per day. When the serum calcium concentrations returned to normal the patient's mental state completely reverted to normal. The urinary and faecal incontinence improved along with the improvement in serum calcium concentrations and was completely restored after two weeks' treatment. He had not relapsed after six months.

Comment

Idiopathic hypoparathyroidism is a rare disorder that occurs in two recognisable forms: familial of variable inheritance and sporadically. Seventy per cent of patients with the sporadic form have parathyroid antibodies. This form is also associated with autoimmune disorders such as hypothyroidism and pernicious anaemia. Patients with no autoantibodies are considered to have idiopathic glandular failure. Hypomagnesaemia, which occurs in malabsorption syndromes, can lead to reversible hypoparathyroidism, but low serum magnesium concentrations also occur

as a secondary feature of hypoparathyroidism owing to non-responsiveness of gut absorption sites. In adults the symptoms of this disorder are due to hypocalcaemia and hyperphosphataemia. The increased neuromuscular excitability is evident when the Chvostek's and Trousseau's sign are positive and symptomatically as tetany and laryngeal stridor. Mental changes that amount to frank dementia and epileptiform convulsions may occur^{1 2} but the dementia does not always respond when the calcium concentrations restored to normal. As far as we know urinary and faecal incontinence have not been reported as complications of this condition. When our patient's hypocalcaemia was corrected with cholecalciferol treatment continence was restored and his mental state improved. It is possible that the increased neuromuscular excitability in the gut and urogenital systems, coupled with the mental change, induced this patient's incontinence.

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MATERIA NON MEDICA

Don't shoot the canary

Do other trainers feel like me—guilty—as the time approaches when the trainee assistant is due to depart? How meagre the training given, how generous the assistance received! My guilt is all the sharper because another year has passed and I have failed to think up an aphorism. Thirty years of GP experience are to be distilled into one shining drop of concentrated wisdom with which I will speed the trainee on his way, guide him in moments of crisis, and get my name into the anthologies alongside Pascal, La Rochefaucauld, and Marcus Aurelius. But you need a talent for this kind of immortality—Sir Thomas Beecham can set the seal on a budding conductor's education: "Never nod encouragingly at the brass!" Perhaps I could plagiarise from an obscure source: "Preventive medicine is medicine corrupted by morality. It is not the business of medicine to make men virtuous but to save them from the consequences of their vices." Maybe a colleague or contemporary could make a suggestion and I could turn it into a polished phrase. I listen earnestly, only to realise that no single unforgettable phrase will serve, so varied are the snares, traps, and pitfalls of clinical medicine.

As for the acutely embarrassing situation—! The ultimate outrage was committed by Dr Tom —, a senior colleague now passed from our midst. On a routine visit, more friendly chat than medical, to an elderly retired couple in a farm cottage Dr Tom idly picked up a powerful air rifle which was propped against the wall. Still conversing, he put it to his shoulder.

We can imagine the feel of warm wood against his cheek, the sharp smell of oil, the boyish impulse that made him squint along the barrel, sighting now on a photograph, now on a mantelpiece ornament. Into his sights came the cage with the family canary and Tom squeezed the trigger.

The report from a gun he believed unloaded startled Tom, shattered a pane of glass behind the cage, and the canary lay slain, gunned down by your friendly GP. Dr Tom made what excuses he could muster and fled. Long afterwards his imagination still wrought scenes such as the arrival of the grandchildren from school.

"What happened to the canary, Gran?"

"The doctor shot it!"

His friends never allowed a Glorious Twelfth to pass without asking Tom when the canary season opened. But all this scarcely

helps me in my quest for an unforgettable piece of advice to Dr Marie, our charming and efficient trainee, as she takes her departure. In later life she would shake her head as she recalled her old trainer. "He wasn't all there at times. All he told me when I left was to spare the family pet!"—ROBERT BAIN, general practitioner, Ayr.

Butterfly book

As the pages turn a host of images appear: in midsummer a red admiral rests for a while on the white paper as we sit writing in the shade of a buddleia; little puffs of "sand" metamorphose into swallow-tails as we stoop to examine the scanty flowers of the Middle Eastern desert; a silver-washed fritillary glides overhead like a bird towards the blackberry hedges of the Wyre Forest; Sir Cyril Clarke, in his glasshouse on the top of the medical school building at Liverpool, gently catches one of the hundreds of butterflies fluttering round us to demonstrate whether it has mated. Evocative as garden scents, the beautiful pictures in *A Complete Guide to British Butterflies* by Margaret Brooks and Charles Knight (Cape £10.95) will undoubtedly encourage the viewer to indulge in such nostalgic memories. For the first time, eggs, caterpillar, chrysalis, and adult of all 60 species that breed in Britain have been photographed, nearly all by Margaret Brooks herself, and the details of each are conveniently described on facing pages. The project has taken 16 years; even more remarkable, she has bred all the butterflies except the Large Blue which, sadly, is now probably extinct in Britain.

The authors hope that their book will help to kindle interest in and knowledge of butterflies, so as to preserve one of nature's most beautiful jewels, constantly threatened by the destruction of habitat from weedkillers, ploughing, natural diseases, and human beings. All the more surprising, therefore, to find a chapter devoted to collecting butterflies which—despite drawing attention to a voluntary code of practice (how effective is that?)—goes into considerable detail about methods of catching and killing. In his introduction David Attenborough also hopes that the photographic expertise of this excellent book might persuade people into collecting by camera, an ideal that should surely be vigorously pursued in this Year of the Butterfly—ANN and ALEX PATON, London.