### LETTERS

Although we report an incidence of 0.18%, all patients readmitted with advanced disease, in accordance with other reports.<sup>9,10</sup> In fact it is an important problem since delay in the diagnosis of a malignancy worsens the prognosis and may affect curability.

Until recently, symptomatic cholelithiasis was ill defined. Nonspecific symptoms like abdominal pain, nausea and dyspepsia may lead us to a diagnosis of a gallstone disease with the help of an upper abdominal ultrasonographic examination revealing cholelithiasis. But ultrasound rarely allows for the visualization of intra-abdominal pathology related to gastric or intestinal disorders. Studies reporting the association between colorectal cancer and cholelithiasis suggest further examination for coexisting colorectal malignancy in patients with symptomatic cholelithiasis undergoing laparoscopic or open surgery after the age of 50 years.<sup>13,14</sup> Ultrasound seems to be inadequate, especially after the fifth decade. In this series, all cases, except one, exceeded the age of 50 years.

Since standards and methods of patient examination prior to cholecystectomy have not changed much since the introduction of LC, we believe that a more careful anamnesis may lead to a diagnosis of an intra-abdominal pathology coexisting in patients having cholelithiasis. Especially, patients with atypical symptoms require extremely thorough diagnostic workup like additional laboratory tests, upper gastrointestinal endoscopy, colonoscopy and abdominopelvic ultrasonography as a means of detecting malignancies or other causes of upper abdominal pain, which was recommended by the National Institutes of Health Consensus Development Panel.<sup>15</sup>

Our data and the review of the literature indicate that the diagnosis of cholelithiasis and afterwards laparoscopic exploration must be done seriously and without hurry. Symptoms persisting after LC, especially in patients exceeding an age of 50 years, require prompt and further evaluation in this era of more precise imaging.

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# DiGeorge's syndrome presenting as hypocalcemia in an adult

To the Editor: Seizures can occur in hypocalcemia, and may be the sole presenting symptom.1 There are several congenital forms hypoparathyroidism, some of sporadic and others inherited.<sup>2</sup> A child with hypoparathyroidism was the original description by DiGeorge.<sup>3</sup> The acronym "CATCH 22" (cardiac, abnormal facies, thymic hypoplasia, cleft palate, and hypocalcemia resulting from 22q11 deletions) has been proposed to describe the phenotype that results from congenital failure of development of the third and fourth pharyngeal pouches.4,5 We report a 25-yearold woman with DiGeorge's syndrome who presented with hypocalcemia secondary to hypoparathyroidism.

A 25-year-old East Indian women raised in the Punjab was mildly mentally challenged, never able to go school and illiterate. She had seizures from the age of 10 years. She had no further seizures and dilantin was stopped at age 12. She had no other medical problems and had never been pregnant. She started having tonic-clonic seizures when she was 25 years old, with five minutes of loss of consciousness. She had no fever and no seizure recurrence. The father was diagnosed with hyperprolactinemia due to nonsecretory pituitary tumor and had no family history of hypocalcemia. Her body mass index was 17.4 kg/m<sup>2</sup>. She had dysmorphic facial features, and mild tortuosity of the vessels of the retina but no hemorrhage or exudates. The mouth showed marked thrush and gingival hyperplasia with poor dentation. She had no goiter. Chvostek's and and Trousseau's signs were positive. White blood cells were 8.5 X 109/L, hemoglobin 107 g/L (115-160), sodium 139 mmol/L (135-145), random plasma glucose 4.7 mmol/L (3.3-6.0), serum ionized calcium 0.99 mmol/L (1.15-1.35), serum phosphorus 1.79mmol/L (0.8-1.4), magnesium 0.69 mmol/L (0.65-0.95), 25 hydroxyvitamin D3 4 nmol/L (25-110), 1,25dihydroxyvitamin D 70 pmol/L (40-120), serum parathyroid hormone 0.9 pmol/L (1.0-5.5), TSH 9.3 mU/L (0.38-5.5), free T4 13.7 pmol/L (10.5-20.0), free T3 3.88 pmol/L (2.23-5.35), anti-thyroperoxidase antibodies <10 IU/mL (<36), IgG 13.7 g/L (6.0-16.0), IgA 1.76 g/L (0.7-4.0), IgM 1.5 g/L (0.43-3.15). Anti-HIV 1 and 2 enzyme immune-assay were non-reactive. A CT scan of the head showed large, course calcifications present within the basal ganglia involving the caudate and lentiform nuclei and small calcifications were present within the parenchyma of the cerebellum and right and left cerebral hemispheres. Fluorescence in site hybridizatation (FISH) analysis was consistent with a microdeletion at 22q11.2. Echocardiogram showed no aortic arch abnormalities.

The diagnosis of DiGeorge's syndrome was suspected based on the dysmorphic facial features and the biochemical findings of hypoparathyroidism. Hypoparathyroidism due to del22q11.2 may be misdiagnosed as idiopathic if the diagnosis is not suspected and genetic studies are not done. The syndrome has a large spectrum of presentation, from cases where the most prominent feature of the syndrome is hypocalcemia with hypoparathyroidism, to cases with asymptomatic or late-onset hypocalcemia. The original description of the syndrome was of a child with hypoparathyroidism and recurrent infections. Necropsy findings of three cases showed an absent thymus and parathyroid gland.3 Numerous studies have shown that a deletion within chromosome 22q11 is associated with DiGeorge's syndrome.6 The overall prevalence of DiGeorge's syndrome is 1 in 5950 births.7 Hypocalcemia in this case was due to hypoparathyroidism as the parathyroid hormone concentration was low. Some of the findings in this case, like her seizures at presentation and during childhood and the brain calcification in the head CT scan, suggest that hypoparathyroidism had been present for a long period. We suspect the diagnosis may have been missed during her early life. The third and fourth pharyngeal pouches are a common embryonic precursor for the parathyroid glands. The defect can be caused by impaired migration of neural crest cells into the pouch endoderm.8 In a large series of patients, 60% experienced hypocalcemia when 39% of the patients had seizure secondary to hypocalcemia. Most patients were hypocalcemic in the neonatal period, and only one patient presented at 18 years of age.<sup>5</sup> One recent report described new onset tetany or seizures caused by hypocalcemia in adults with previously

undiagnosed disease.<sup>9</sup> We suggest including serum calcium in the survey of patients with known 22q11 microdeletion.

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