Visceral leishmaniasis complicated by haemophagocytosis

A 23-year-old man, resident of Himachal Pradesh, presented with moderate grade fever (with night sweats) for 11 months, which had increased in intensity for 1 month. He also had loose stools, loss of appetite and loss of weight (10 kg). He was on antitubercular treatment for 9 months, which had been modified for the past 4 months because of raised serum transaminases. Low blood counts had been detected a few months ago and a bone marrow examination done elsewhere was reported as megaloblastosis for which he had received vitamin supplements without benefit. He was a smoker and used to drink about 50 ml of alcohol daily. On examination, he was pale, had high-grade fever and mild ascites but the rest of the systemic examination was normal. There was no hepatosplenomegaly or lymphadenopathy. Investigations revealed pancytopenia (haemoglobin 7.4 g/dl, total leucocyte count 600/cmm and platelet count 85 000/cmm), hypoalbuminaemia and elevated transaminases (alanine aminotransferase [ALT] 145.9 IU/L, aspartate aminotransferase [AST] 67.5 IU/L). Contrast-enhanced computed tomography (CECT) chest and abdomen showed bilateral patchy apical fibrosis suggestive of old tuberculosis with caecal and ileal wall thickening. Colonoscopy showed an ulcer in the terminal ileum, which on biopsy showed mild lymphoplasmacytic infiltrates and oedema. He was started on broad-spectrum antibiotics. However, he continued to have high-grade intermittent fever up to 40 °C. Multiple blood and urine cultures were sterile and malarial parasite microscopy and antigen test were negative. Ascitic fluid was 40 °C. Multiple blood and urine cultures were sterile and malarial parasite microscopy and antigen test were negative. Ascitic fluid was 145.9 IU/L, aspartate aminotransferase [ALT] 3290 ng/ml, serum fibrinogen 1.78 g/dl). A diagnosis of visceral leishmaniasis with haemophagocytic syndrome was made, and amphotericin B 1 mg/kg was started. He became afebrile, the blood counts showed improvement (haemoglobin 7.4 g/dl, total leucocyte count 2800/cmm and platelet count 86 000/cmm) and the transaminases decreased ALT/AST 25.9 IU/L, 22.6 IU/L). However, 5 days later, his dyspnoea worsened and chest X-ray showed left-sided pneumonia. Despite broad-spectrum antibiotics, he had progressive respiratory distress, to which he succumbed. A post-mortem liver biopsy confirmed haemophagocytosis (Fig. 2).

Although, 90% cases of visceral leishmaniasis (VL) in India are from Bihar, other endemic hot spots are emerging—the district of Kinnaur (along Sutlej valley) in Himachal Pradesh (residence of our patient) being one such. VL associated with clinically important haemophagocytosis is rare. A review published in 2008 reported only 56 cases, a majority being children. They noted that the first bone marrow often failed to establish the presence of LD bodies (in two-third) and haemophagocytic lymphohistiocytosis (HLH) (in one-third). This was similar to a series of 12 cases from France. In our patient too, the first bone marrow aspiration (done elsewhere) did not show either, and the bone marrow at our institution failed to show haemophagocytosis. High-grade fever may be an important clue as found in the series from France. In addition, ascites (present in our patient), jaundice, coagulopathy (present in our patient) and hypofibrinogenaemia (present in our patient) have been reported to be clues to the presence of haemophagocytic syndrome in VL. Although most patients have hepatosplenomegaly, absence of organomegaly in patients with VL (as in our patient) has been reported, mostly in HIV positive patients. The mere presence of haemophagocytosis is not synonymous with the syndrome. Indeed, it is reported that 46% of patients of VL may have some evidence of haemophagocytosis in the marrow. The treatment for VL with haemophagocytic syndrome is not uniformly defined. However, infection-associated HLH resolves with treatment of infection alone, and our patient too had responded to initial amphotericin therapy. Our patient is similar to a previous report in a child from India, in that both hailed from mountainous regions (an emerging hot spot of VL) and thus diagnosis was missed for a long time, which may be a contributing factor for the haemophagocytic syndrome.

To conclude, we have described a patient with VL-associated haemophagocytic syndrome and highlighted the need to recognize this entity early.

REFERENCES

diastolic dysfunction were implicated. Judicious use of frusemide and carvedilol resulted in dramatic improvement.

**Vignette four**

A 20-year-old man presented with difficulty in breathing. He worked as a tea vendor and had no antecedent history of note. He had complained of fatigue and difficulty in breathing which progressed rapidly. He was intubated and placed on a volume ventilator in view of the hypercapnic respiratory failure. The patient’s chest X-ray was normal. I told the resident on call to ask the relatives about anything that might suggest a clue. Two hours later, the resident called me and narrated that one of the regular customers of the tea shop had commented to the owner, ‘Why do you employ this chap who is sleepy during daytime?’ In consultation with the neurologist, we confirmed the diagnosis of myasthenia gravis.

The task of present-day teachers is to constantly look for opportunities to integrate an appreciation of physical signs and their underlying physiological principles. Clinical wisdom and technological inputs should complement each other. Then, and only then, will there always be a robust task force of clinical tutors; we need them now more than ever before.

**REFERENCE**


Om Prakash
Department of Medicine
St Martha’s Hospital
Bengaluru
Karnataka

**Clinical problem-solving: A dying art?**

Medical practice is becoming increasingly complex, with the availability of newer diagnostic technologies and therapeutic modalities. The following cases reflect some of these aspects.

**Vignette one**

A 50-year-old obese woman was undergoing a routine medical check-up. She was asymptomatic, and I was surprised when our ultrasonologist informed me that she had an abscess in the left lobe of the liver. I was shown a hypoechoic area in the liver just below the cardiophrenic notch. After transient consternation, I asked for a glass of water for the patient; the scintillating air–water interface of the sliding hiatus hernia became a cause of much embarrassment for the young radiologist!

**Vignette two**

A 30-year-old man presented to the emergency room with rapidly increasing weakness of his limbs. Elsewhere, a diagnosis of Guillain–Barre syndrome was considered and he was referred to our hospital. An ECG revealed a prolonged Q–T interval. A senior resident suspected that this was a pseudo Q–T prolongation, and that the ECG showed prominent U waves. The serum potassium level was 2.2 mEq/L; metabolic correction followed with return of the T and disappearance of the U waves, and the patient recovered.

**Vignette three**

A 55-year-old woman with long-standing diabetes mellitus and nephropathy was being treated with periodic haemodialysis. She had undergone coronary angioplasty 2 years previously. Following the renal transplant, she did well for a few days and then developed cough, dyspnoea and orthopnoea. Her ejection fraction was 65% and the lung fields were clear on a chest X-ray. A detailed review showed modest anaemia (9 g/dl), persistent tachycardia and arterial desaturation while supine. Her blood pressure was 160/60 mmHg. Intrigued by the wide pulse pressure, a visiting consultant attributed this to the arteriovenous fistula which had been created 4 years previously. High output cardiac failure, along with a degree of
considerable improvement in the quality of Indian research has been observed during the past few years as is evident by the increasing number of Indian medical journals now being assigned an impact factor and getting indexed in MEDLINE.

As per the Journal Citation Reports (JCR) of 2010, 2011 and 2012, more than 100 Indian journals, of which 35 are biomedical journals, have been assigned an impact factor, and 49 biomedical journals are currently indexed in MEDLINE.

An exponential increase in the number of journals with an ISI impact factor from one in 1981–85 to three in 1998 to 35 in 2013 and an increase in the number of journals indexed in MEDLINE from 27 in 1998 to 49 in 2013 shows that Indian medical research is progressing on the right track. The Indian Journal of Medical Research is the first Indian medical journal to cross an impact factor of 2 (Table I). Also, it is evident from the website of different journals that more than 14 journals have an impact factor of more than one. It is creditable for the Indian Journal of Medical Research and is an indication that the journal is reaching every corner of the world and is not inferior to any other international journal.

Table I. Indian journals included in Science Citation Index and their impact factor

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of journal</th>
<th>Impact factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>1</td>
<td>Indian J Med Res</td>
<td>1.826</td>
</tr>
<tr>
<td>2</td>
<td>Indian J Exp Biol</td>
<td>0.702</td>
</tr>
<tr>
<td>3</td>
<td>J Postgrad Med</td>
<td>1.589</td>
</tr>
<tr>
<td>4</td>
<td>J Vector Borne Dis</td>
<td>–</td>
</tr>
<tr>
<td>5</td>
<td>Pharmacogn Mag</td>
<td>0.432</td>
</tr>
<tr>
<td>6</td>
<td>Indian J Biochem Bio</td>
<td>0.824</td>
</tr>
<tr>
<td>7</td>
<td>Indian J Pediatr</td>
<td>0.090</td>
</tr>
<tr>
<td>8</td>
<td>Indian J Ophthalmol</td>
<td>0.827</td>
</tr>
<tr>
<td>9</td>
<td>Indian J Med Microbiol</td>
<td>1.006</td>
</tr>
<tr>
<td>10</td>
<td>Indian J Dermatol Veneereol</td>
<td>0.932</td>
</tr>
<tr>
<td>11</td>
<td>Neur ol India</td>
<td>0.834</td>
</tr>
<tr>
<td>12</td>
<td>Ann Indian Acad Neu r</td>
<td>0.415</td>
</tr>
<tr>
<td>13</td>
<td>Indian J Pharmacol</td>
<td>0.303</td>
</tr>
<tr>
<td>14</td>
<td>Indian J Pathol Microbiol</td>
<td>0.570</td>
</tr>
<tr>
<td>15</td>
<td>Indian J Pharm Sci</td>
<td>0.455</td>
</tr>
<tr>
<td>16</td>
<td>Int J Diabetes Dev C</td>
<td>0.509</td>
</tr>
<tr>
<td>17</td>
<td>Indian J Orthop</td>
<td>0.285</td>
</tr>
<tr>
<td>18</td>
<td>J Cytol</td>
<td>0.333</td>
</tr>
<tr>
<td>19</td>
<td>Biomed Res-India</td>
<td>0.119</td>
</tr>
<tr>
<td>20</td>
<td>J Cancer Res Ther</td>
<td>0.825</td>
</tr>
<tr>
<td>21</td>
<td>Indian J Virol</td>
<td>1.133</td>
</tr>
<tr>
<td>22</td>
<td>Natl Med J India</td>
<td>0.541</td>
</tr>
<tr>
<td>23</td>
<td>Indian J Surg</td>
<td>–</td>
</tr>
<tr>
<td>24</td>
<td>Indian J Biotechnol</td>
<td>–</td>
</tr>
<tr>
<td>25</td>
<td>Indian J Hematol Blo</td>
<td>–</td>
</tr>
<tr>
<td>26</td>
<td>Indian J Microbiol</td>
<td>–</td>
</tr>
<tr>
<td>27</td>
<td>Indina J Otolaryngol</td>
<td>–</td>
</tr>
<tr>
<td>28</td>
<td>J Biosci</td>
<td>1.888</td>
</tr>
<tr>
<td>29</td>
<td>J Genet</td>
<td>1.338</td>
</tr>
<tr>
<td>30</td>
<td>J Environ Biol</td>
<td>–</td>
</tr>
<tr>
<td>31</td>
<td>Hem India</td>
<td>–</td>
</tr>
<tr>
<td>32</td>
<td>Indian J Anim Res</td>
<td>–</td>
</tr>
<tr>
<td>33</td>
<td>Indian J Anim Sci</td>
<td>–</td>
</tr>
<tr>
<td>34</td>
<td>Indian J Pharm Res Res</td>
<td>–</td>
</tr>
<tr>
<td>35</td>
<td>J Amat Soc India</td>
<td>–</td>
</tr>
</tbody>
</table>

Although the progress is on the right track, we need to work harder to improve the credentials of Indian research. This is possible only by making larger investments in medical research.

REFERENCES

Basavraj S. Nagoba
Namdev M. Suryawanshi
Research and Development
Department of Microbiology
MIMSR Medical College

Sohan P. Selkar
Department of Physiotherapy
MIP College of Physiotherapy

Latur
Maharashtra

dr_bsnagoba@yahoo.com
bsnagoba@indiatiemes.com

Humour in medicine

In reading Pai and Shivasankar’s ‘Are surgeons spunkier than non-surgeons?’ one realizes that this quasi-scientific effort is largely based on humour rather than evidence-based medicine. The methodology ignores a myriad of pertinent variables such as surgical specialty, elective versus emergency procedures, and intra- and perioperative hormone levels to name but a few. The terms ‘spunkier’ and ‘gutsier’ are appropriately used in place of the more earthy appellations of writers of fiction referring to the attributes of testicular size and composition. The authors have also artfully ducked the gender issue. In the USA, it is estimated that about 30% of physicians are women and that they constitute 19% of all surgeons. In many medical schools, 50% of students are women, and in some specialties they are now in the majority. Should not the authors have avoided the sexist implications of this omission and measured the oestrogen and testosterone levels of women surgeons with due attention to diurnal, monthly, climacteric and other factors—details of which they no doubt would have been delighted to supply in the interests of scientific inquiry?

Humour in medicine is a complex topic ranging from the alleged benefits of humour and laughter to the therapeutic virtues of chicken soup. In a review, Bennett has arbitrarily divided the subject into humour and health, humour and patient–physician communication, humour and patient care, humour and the health professional, humour in medical education and humour in the medical literature—all admittedly subjective. In the medical literature, it encompasses a spectrum of claims of therapeutic value, innocent fun and ultimately the outright hoax.

Sir William Osler (1849–1919) is a prime exemplar of this phenomenon. Osler was the pre-eminent physician of his time. He held professorships at McGill University, the University of Pennsylvania and Johns Hopkins University, and capped his career...
REFERENCES

7 Davis EY. Vaginismus. Med News (Philadelphia) 1884;45:673.

Richard L. Golden
Department of Medicine
State University of New York at Stony Brook
relslow@gmail.com

Publishing articles of relevance to general practitioners

I was shocked to see a paper titled ‘Are surgeons spunkier than non-surgeons?’ by Sanjay A. Pai and Shweta Shivasankar published in the Short Report section of the Journal.1 I feel papers such as these are a waste of valuable space, time, money and talent. Please publish articles which help ordinary general practitioners like us, who practise within the Indian context.

A newspaper is a better place to publish such articles rather than scientific journals. Just by virtue of being on the working committee, the author has no right to publish this paper. Just because such authors are fluent in English and can write well, they have no business publishing such material and considering themselves the ‘changers’. Please do not allow this to happen again.

Devegowda Mohan
613 Second main, First stage
Indiranagar
Bangalore
Karnataka
docmohan@msn.com

REFERENCE


Sturge–Weber syndrome

A 42-year-old man presented with generalized tonic-clonic convulsions for 2 days. He was on treatment for seizure disorder since the age of 18 years. On examination, there were erythematous hyperpigmented plaques with swelling of the right upper lip. The lesions (Fig. 1) had been present since birth. CT scan of the brain revealed hyperdense gyriiform calcification in the right parieto-occipital lobe (Fig. 2). These features are diagnostic of Sturge–Weber syndrome which is characterized by a port wine stain over the face, ocular abnormalities (glaucoma and choroidal haemangioma) and leptomeningeal angiomas.1 Neurological manifestations include uncontrolled epileptic crisis, hemiparesis, hemiatrophy and mental retardation.2 CT brain reveals contrast enhancement of angioma,
Abnormal brain, ependymal and medullary veins. Treatment includes anticonvulsants, carbonic anhydrase inhibitors, beta-blockers and aspirin. The port wine stain is treated with pulsed tunable dye laser.

REFERENCES

N.S. Neki
Department of Medicine
Government Medical College and Guru Nanak Dev Hospital
Amritsar 143001, Punjab
India
drneki123@gmail.com

5-year subscription rates

5-year subscription rates for The National Medical Journal of India are now available. By subscribing for a duration of 5 years you save almost 14% on the annual rate and also insulate yourself from any upward revision of future subscription rates. The 5-year subscription rate is:

**INDIAN SUBSCRIBERS:**
- `2600 for institutions
- `1300 for individuals

**OVERSEAS SUBSCRIBERS:**
- US$ 365 for institutions
- US$ 182 for individuals

Send your subscription orders by cheque/demand draft payable to The National Medical Journal of India. Please add `75 for outstation cheques. If you wish to receive the Journal by registered post, please add `90 per annum to the total payment and make the request at the time of subscribing.

Please send your payments to:
- The Subscription Department
- The National Medical Journal of India
- All India Institute of Medical Sciences
- Ansari Nagar
- New Delhi 110029