A painful train of events: the rebirth of railway spine

Sirs,
The most succinct reflection on the report by Buskila et al. (1) of the relatively significant prevalence of chronic pain, psychological disorder, and disability (fibromyalgia) after major train collisions would be “there (1), known that” (2, 3). The report signifies an ominous event: the repetition of history. A once epidemic phenomenon appears to have been recognised again. Here, one is concerned about the re-emergence of railway spine (2, 3).

The history of railway spine (now called post-trauam collision fibromyalgia by some) has been reviewed in detail elsewhere (2, 3). The lesson learned from this history is that railway collisions are quite horrific events, often resulting in explosions, serious injury, and many fatalities. Among the survivors, however, there may be a subset whose symptoms appear to occur when they “had not received a scratch”(4). These patients puzzled medical science in the 19th century (4), but they should not do so now. In fact, the eventual understanding of railway spine developed into appreciating it as a post-traumatic stress disorder (2). Currently, the evidence points to some cases of post-traumatic fibromyalgia as having more to do with post-traumatic stress disorder than any other disorder (5).

From the original cases series reported as railway spine (4), the symptoms can be listed as in Table I.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain on movement of spine</td>
<td>Pain processing occurring in individuals after trauma.</td>
</tr>
<tr>
<td>Irritability</td>
<td>Increased pain processing. No need for pessimism.</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Loss of sexual desire.</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td></td>
</tr>
<tr>
<td>Loss of sexual desire</td>
<td></td>
</tr>
</tbody>
</table>

The history of this medico-legal and social development of railway spine has been reviewed by Keller, wherein the relevance and parallels to fibromyalgia are apparent (6). Inevitably, in the absence of underlying scientific support, railway spine lost steam as did train (6) over the years. Scientists began to denote Erichsen’s theories and the lack of experimentation to support them. In time, other prominent physicians, such as the Parisian neurologist Jean-Martin Charcot, would bring forward the psychology of traumatic neurosis, applied to types of injuries not necessarily involving the spine and which led to more effective treatments than any based on injury models. Indeed, by the turn of the century, medical articles had started to review the history of railway spine under such titles as “Neuroses Following Railroad Injuries” (7). Did we learn (2, 3), or didn’t we? (1). He who lives to see two or three generations is like a man who sits in a conjurer’s booth at a fair, and witnesses the performance twice or thrice in succession. The tricks were meant to be seen only once; and when they are no longer a novelty and cease to deceive, their effect is gone (8).

The novelties of one generation are only the resuscitated fashions of the generation before last (9).

R. FERRARI, MD, FRCP, FACP, Professor
Department of Medicine and Department of Rheumatic Diseases, University of Alberta, Edmonton, Alberta, Canada.

Please address correspondence to: Dr Robert Ferrari, Department of Medicine, 13-103 Clinical Sciences Building, University of Alberta, Edmonton, Alberta, Canada T6G 2P4. E-mail: rferrari@shaw.ca

Competing interests: none declared.

References
8. SCHOPENHAUER A: On the sufferings of the world. Middlesex, England: Penguin Books 3 Tel-Aviv Sourasky Medical Centre, Israel; 7 Tel-Aviv Sourasky Medical Centre, 6 Weizman St., Tel-Aviv 64239, Israel.

Competing interests: none declared.

Reply
Sirs,
We read with interest the letter of Dr Ferrari and would like to thank him for his historical perspective on the issue of fibromyalgia following a railroad crash. It seems a pity though to adopt such a pessimistic point of view, as might inevitably be expected to spring out of viewing the topic through a Schopenhauer prism, as Dr Ferrari has chosen to do. Indeed, the association between train crashes and chronic pain has been recognised for a long time. In his original paper coining the term “fibrositis”, decades later to evolve into “fibromyalgia”, William Gowers describes the following: “... Another definite form of fibrositis is the traumatic, induced by sudden violent tension on the tendentious and ligamentous structures ...” I recently saw a woman who had strained her back severely during the turning of a tracmar three months before. Even since the accident there had been extreme sensitiveness of the dorsal muscles to the spine bone.” (1). Similarly, Frida Kahlo, the great Mexican artist, suffered a tragic life of chronic pain ever since being severely traumatised at the age of 18 in the collision of a street car and a bus, and probably in fact endured longstanding, poorly-treated fibromyalgia (2). And yet, we still reject Dr Ferrari’s pessimism. Over the last couple of decades, enormous progress has been made in understanding the etiology and pathophysiology of fibromyalgia (3), as well as improving the understanding of the relationship between trauma, PTSD and pain (4, 5). Thus, we are closer than ever before to understand the way in which central sensitisation develops and tics (6). We now can begin to understand the way in which activation of the autonomic nervous system, through trauma and/or stress, can contribute to the development and stabilisation of altered pain processing (7). With this additional event then we are far better posed to incorporate the train – trauma model into the broader context of fibromyalgia. We no longer need to treat it as a “Neuroses following railroad injuries”, a terminology which, in fact, contributes next to nothing to explain the alteration of pain processing occurring in individuals after such events. Thus, rather than use metaphors of conjuror’s booth and resuscitated fashions, we would prefer the old image of “nanos gigan tumorum numeris insidibilibus” (dwarfs standing on the shoulders of giants). We can draw on the 19th century clinical acumen and experience and add our 21st century enhanced acuity regarding mechanisms involved in pain processing. No need for pessimism.

J. ABLIN, MD
D. BUSKILA, MD
1 Tel-Aviv Sourasky Medical Centre, Israel;
2 Soroka Medical Centre, Beer-Sheva, Israel.

Address correspondence to: Jacob N. Ablin, MD, Tel-Aviv Sourasky Medical Centre, 6 Weizman St., Tel-Aviv 64239, Israel.
E-mail: ajacob@post.tau.ac.il

Competing interests: none declared.

References