Teaching NeuroImages: Palindromic Rheumatoid Meningitis: A Tale of Two Hemispheres

Ahmed Itrat MD1,2, Asma Akbar Lada3k, Rula A Hajj-Ali, MD4

Neurology® Published Ahead of Print articles have been peer reviewed and accepted for publication. This manuscript will be published in its final form after copyediting, page composition, and review of proofs. Errors that could affect the content may be corrected during these processes.
1Department of Neurology, Cleveland Clinic Akron General, Akron, Ohio

2Cerebrovascular Center, Cleveland Clinic, Cleveland, Ohio

3Aga Khan University Medical College, Karachi, Pakistan

4Department of Rheumatology, Cleveland Clinic, Cleveland, Ohio

Correspondence to:

Ahmed Itrat, MD,

Email: itrata@ccf.org

Word Count: 98

Title Character Count: 53

References: 2

Figures: 1

Search terms: [132] Autoimmune Diseases, Meningitis, Rheumatoid arthritis

Study Funding: None

Disclosure:

Dr Ahmed Itrat reports no disclosures

Dr Rula A. Hajj-Ali reports no disclosures
Asma Akbar Ladak reports no disclosures

Case Summary:

A 61-year-old-man presented with right-sided somatosensory seizures and evidence of left-sided pachy-meningeal enhancement on a cerebral MRI (Fig-1A-C). Review of prior images demonstrated similar inflammatory changes in the contralateral hemisphere on MRI at time of a prior seizure twelve-years-ago (Fig-1D-E). Serological and cerebrospinal-fluid analysis, and a brain PET-scan demonstrated no abnormality. Brain biopsy revealed chronic lymphohistiocytic meningitis. His episodic arthropathy prompted rheumatological workup which revealed elevated Cyclic Citrullinated Peptide and Rheumatoid Factor, suggestive of palindromic rheumatism, with corresponding imaging findings reminiscent of those described with rheumatoid meningitis.\textsuperscript{1,2} He improved after a brief course of steroids with resolution of meningeal enhancement (Fig-1F).
## Appendix 1: Authors

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed Itrat, MD</td>
<td>Cleveland Clinic Akron General, Akron, Ohio, USA</td>
<td>Study concept or design and revising manuscript for content</td>
</tr>
<tr>
<td>Asma Akbar Ladak</td>
<td>Aga Khan University, Karachi, Pakistan</td>
<td>Drafting/revising the manuscript for content, including medical writing for content</td>
</tr>
<tr>
<td>Rula A Hajj-Ali, MD</td>
<td>Cleveland Clinic, Cleveland, Ohio, USA</td>
<td>Study concept or design and revising manuscript for content</td>
</tr>
</tbody>
</table>
References:

Figure Title: Composite Magnetic Resonance Images (MRI) of brain showing asymmetric inflammatory changes and resolution from different time points.

Figure Legend:

A-C, D-E, and F demonstrate MRI sequences from three different time-points respectively. The pattern of cortical hyperintensity and enhancement in the left hemisphere from 2016 (A-C) compares to the predominantly right hemispheric involvement in 2004 (D-E), with inflammation resolving three-months-later (F).
Teaching NeuroImages: Palindromic Rheumatoid Meningitis: A Tale of Two Hemispheres
Ahmed Itrat, Asma Akbar Ladak and Rula A Hajj-Ali

*Neurology* published online June 14, 2021
DOI 10.1212/WNL.0000000000012365

This information is current as of June 14, 2021

<table>
<thead>
<tr>
<th>Updated Information &amp; Services</th>
<th>including high resolution figures, can be found at: <a href="http://n.neurology.org/content/early/2021/06/14/WNL.0000000000012365.citation.full">http://n.neurology.org/content/early/2021/06/14/WNL.0000000000012365.citation.full</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Subspecialty Collections</td>
<td>This article, along with others on similar topics, appears in the following collection(s): <a href="http://n.neurology.org/cgi/collection/autoimmune_diseases">Autoimmune diseases</a></td>
</tr>
<tr>
<td>Permissions &amp; Licensing</td>
<td>Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="http://www.neurology.org/about/about_the_journal#permissions">http://www.neurology.org/about/about_the_journal#permissions</a></td>
</tr>
<tr>
<td>Reprints</td>
<td>Information about ordering reprints can be found online: <a href="http://n.neurology.org/subscribers/advertise">http://n.neurology.org/subscribers/advertise</a></td>
</tr>
</tbody>
</table>