

# Short case

Short case publication... version 1.11 | Edited by professor Yasser Metwally | February 2008



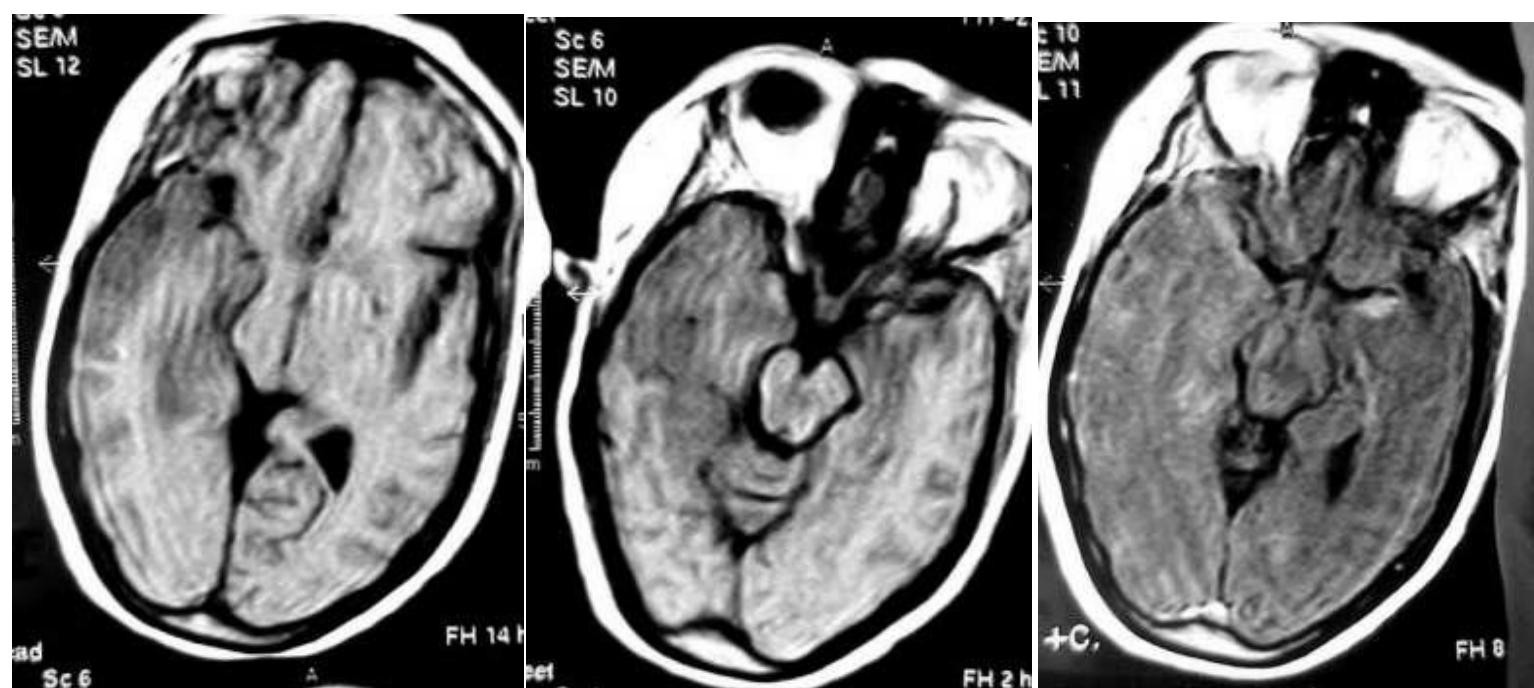
## Short case

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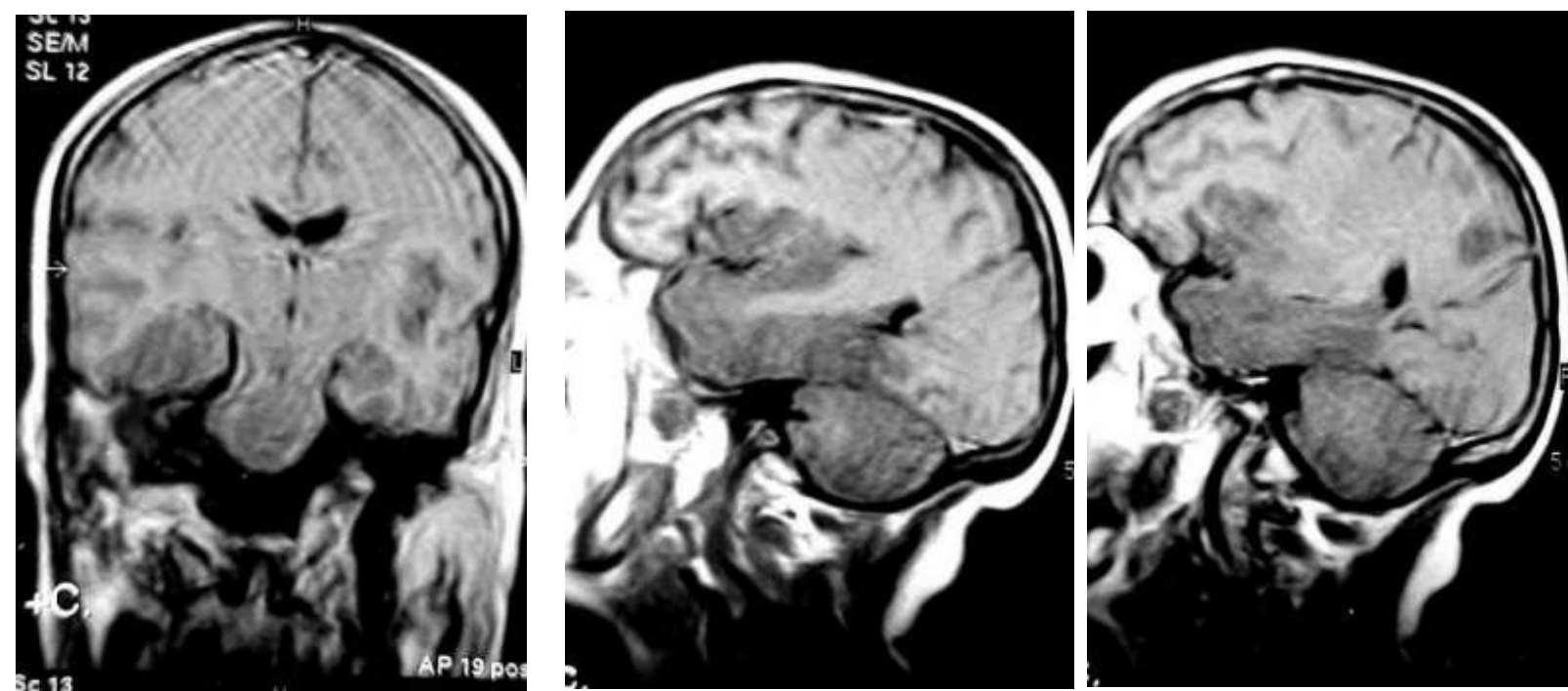
Visit my web site at:  
<http://yassermetwally.com>

A 40 years old female patient presented clinically with fever, grand male fits, disturbed level of consciousness and meningeal irritation signs

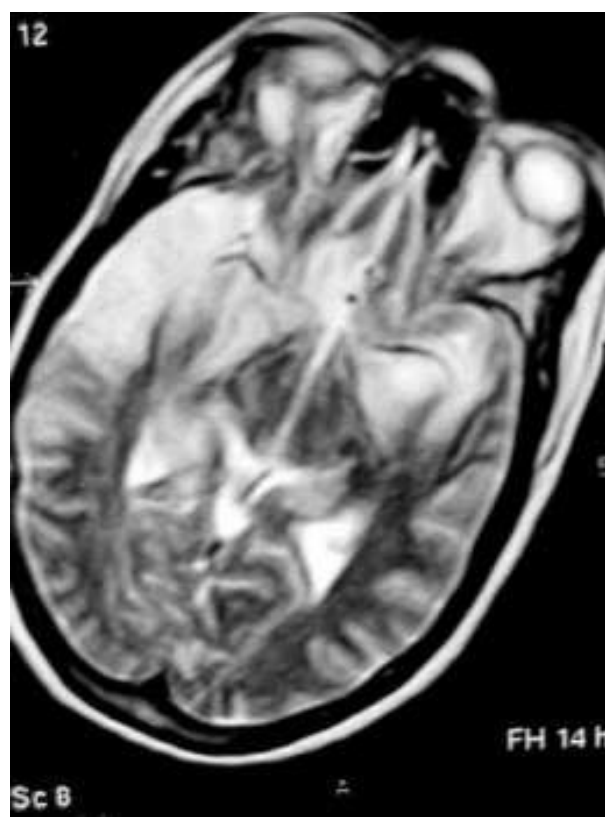
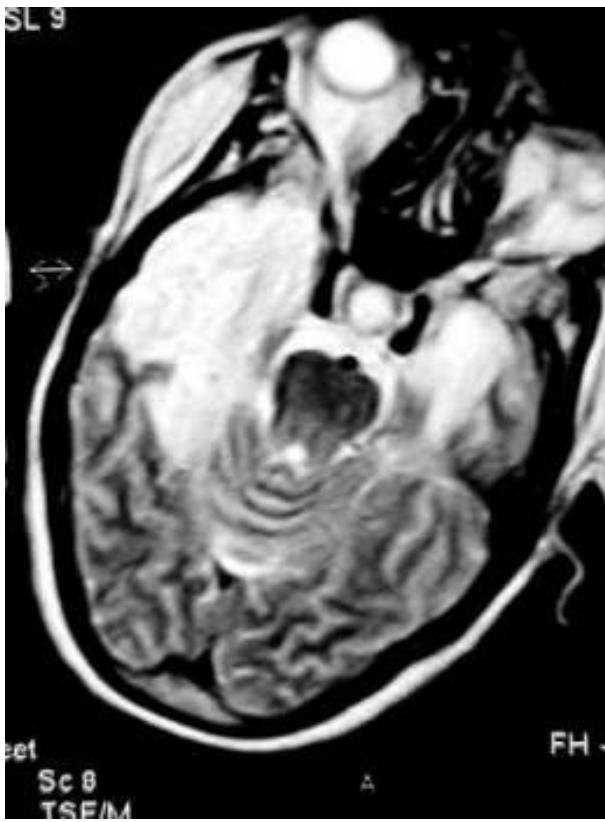
**DIAGNOSIS:** HERPES SIMPLEX ENCEPHALITIS



**Figure 1. Herpes simplex encephalitis. Precontrast MRI T1 (A,B) and postcontrast MRI T1 (C). Notice the cortical (gray matter) hypointensity involving the temporal lobes bilaterally, more on the right side (A,B). The signal changes are almost exclusively cortical involving the medial (amygdala, hippocampus) and the lateral temporal cortical area and extending posteriorly over the lateral surface of the right temporal lobes. The T1 hypointensity can be seen extending to the subcortical white matter area in the right temporal lobe (B). There is also a central hypointense zone involving the midbrain. In the postcontrast image (C) cortical enhancement is seen over the medial surface of the temporal lobes, more over the left side.**



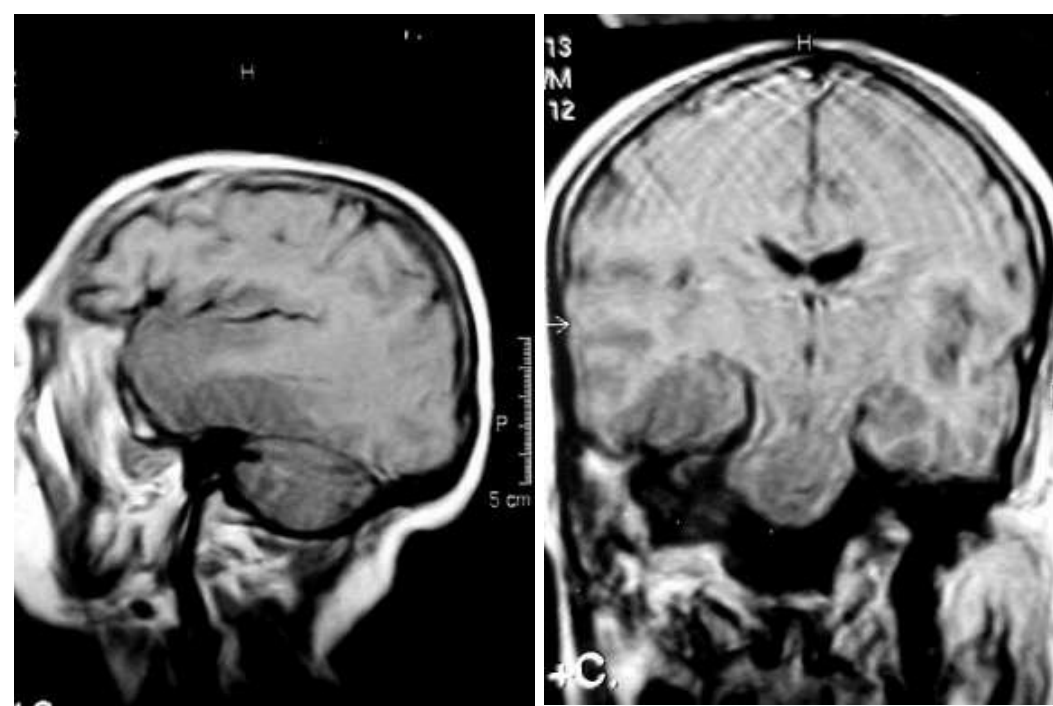
**Figure 2. Herpes simplex encephalitis. Postcontrast MRI T1 images. Notice the cortical (gray matter) hypointensity involving the temporal lobes bilaterally, more on the right side (A,B). The signal changes are almost exclusively cortical involving the medial (amygdala, hippocampus) and the lateral temporal cortical area, bilaterally more on the right side. Notice the insular hypointensity on the left side (A).**



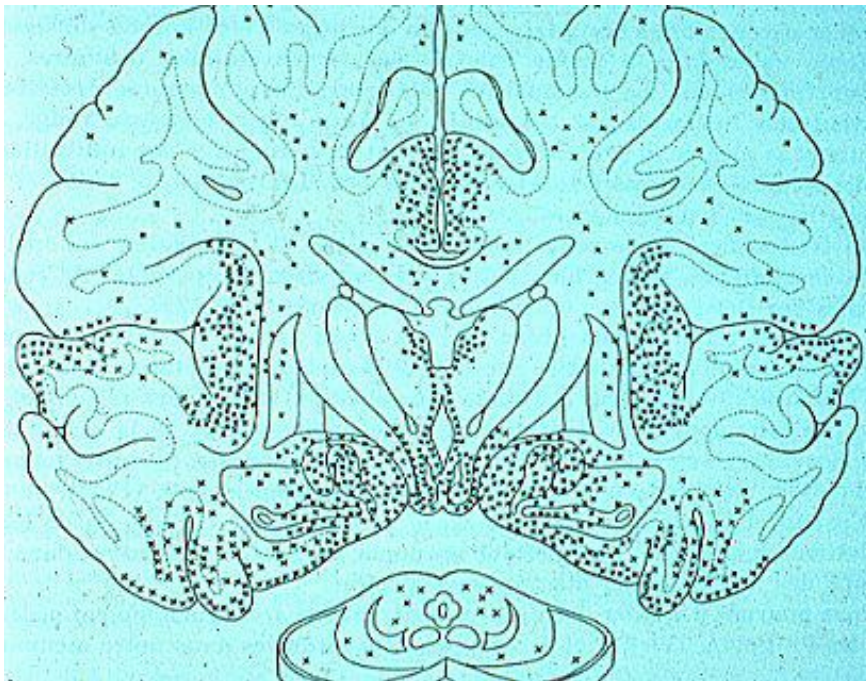
**Figure 3. Herpes simplex encephalitis. MRI T2 images showing involvement of the temporal lobes bilaterally, more on the right side. Both the medial and the lateral surfaces are involved on the right side, while on the left side only the medial surface is involved. The signal changes extend to the subcortical white matter on the right side. The MRI signal changes most probably represent edema.**



**Figure 4. MRI FLAIR images (A,B) and precontrast MRI T1 image (C). The temporal lobes abnormalities are better visualized on FLAIR images (A). Notice the insular involvement seen as a hyperintense band on The FLAIR image (B) and a hypointense band on the precontrast T1 image. (C)**



**Figure 5. Herpes simplex encephalitis. Postcontrast MRI T1 images. Notice the cortical (gray matter) hypointensity involving the temporal lobes bilaterally, more on the right side (A,B). The signal changes are almost exclusively cortical involving the medial (amygdala, hippocampus) and the lateral temporal cortical area, bilaterally more on the right side. Notice the insular hypointensity on the left side (B)**



**Figure 6. Schematic of the typical areas of involvement by herpes simplex virus. Note the propensity of involvement in the medial temporal lobes, in the insular cortex and the cingulate cortex.**

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## Addendum

- ◆ A new version of short case is uploaded in my web site every week (every Saturday and remains available till Friday.)
- ◆ To download the current version follow the link "<http://pdf.yassermetwally.com/short.pdf>".
- ◆ You can download the long case version of this short case during the same week from: <http://pdf.yassermetwally.com/case.pdf> or visit web site: <http://pdf.yassermetwally.com>
- ◆ To download the software version of the publication (crow.exe) follow the link: <http://neurology.yassermetwally.com/crow.zip>
- ◆ At the end of each year, all the publications are compiled on a single CD-ROM, please contact the author to know more details.
- ◆ Screen resolution is better set at 1024\*768 pixel screen area for optimum display
- ◆ For an archive of the previously reported cases go to [www.yassermetwally.net](http://www.yassermetwally.net), then under pages in the right panel, scroll down and click on the text entry "downloadable short cases in PDF format"

## References

1. Metwally, MYM: Textbook of neurimaging, A CD-ROM publication, (Metwally, MYM editor) WEB-CD agency for electronic publishing, version 9.1a January 2008