NEUROIMAGE

VOLUME 19, NUMERO 1
JUILLET 2003

NEURORADIOLOGY
MUHC–MNH

VOLUME 19, NUMBER 1
JULY 2003

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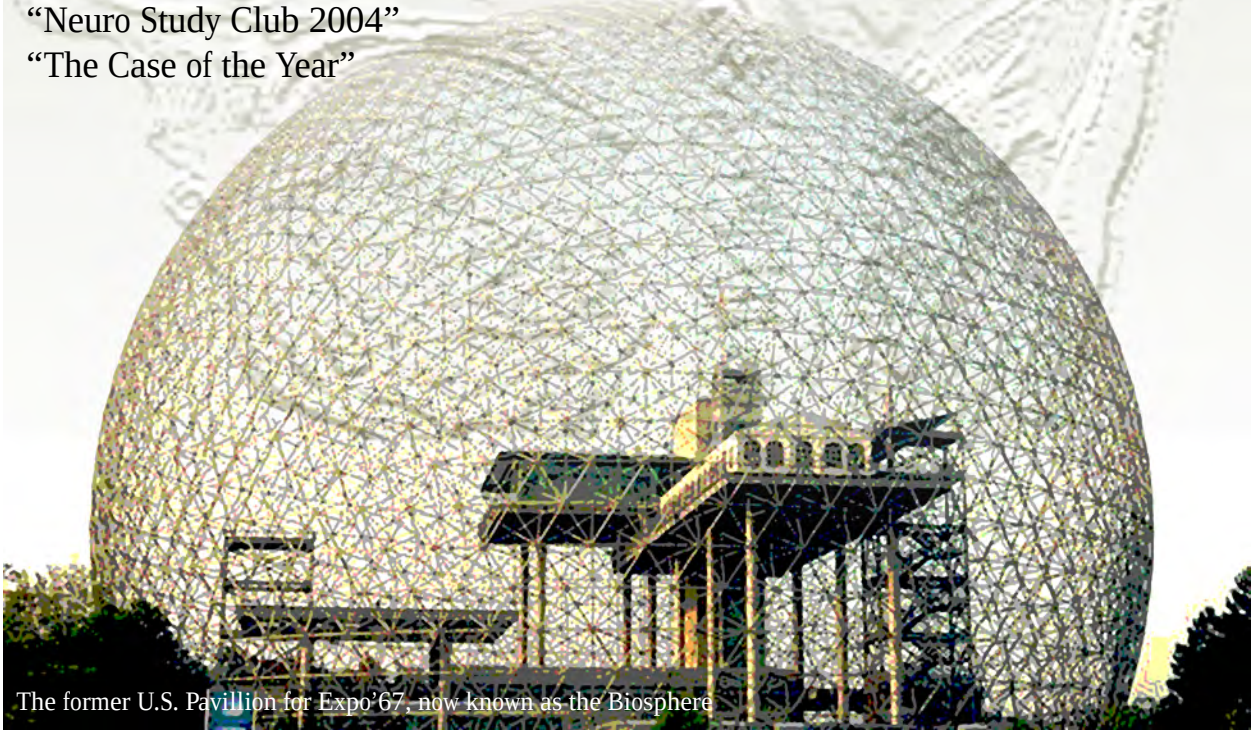


The former U.S. Pavillion for Expo’67, now known as the Biosphere

Letter from the Editor

Dr. Denis Melançon

Our Neuroradiology Study Club will celebrate its 30th anniversary next year. In honour of this important occasion, we are planning a special session within the ICR program. I am pleased to extend a special invitation to all our friends who, while in training with us, or while visiting us, have had the opportunity to attend some of our sessions. This gathering will permit us to share memories as well as some most unusual cases. Be sure this special event is noted in your agenda. I hope for a large turnout in order to enjoy the pleasure of your company one last time prior to retirement.

The New Palais des Congrès in Montreal

The Case of the Year

Dr. Denis Melançon and Dr. Marie-Christine Guiot

This is the one year history of a young man who presented to medical attention complaining of diplopia for a few months. He had no other complaints. We were surprised by the lesion, causing so little deficit. And we were puzzled by its nature. From the different signals, most of us thought that it was a lymphoma. One lady resident, from Turino , Italy, suggested granulomatous lesion.

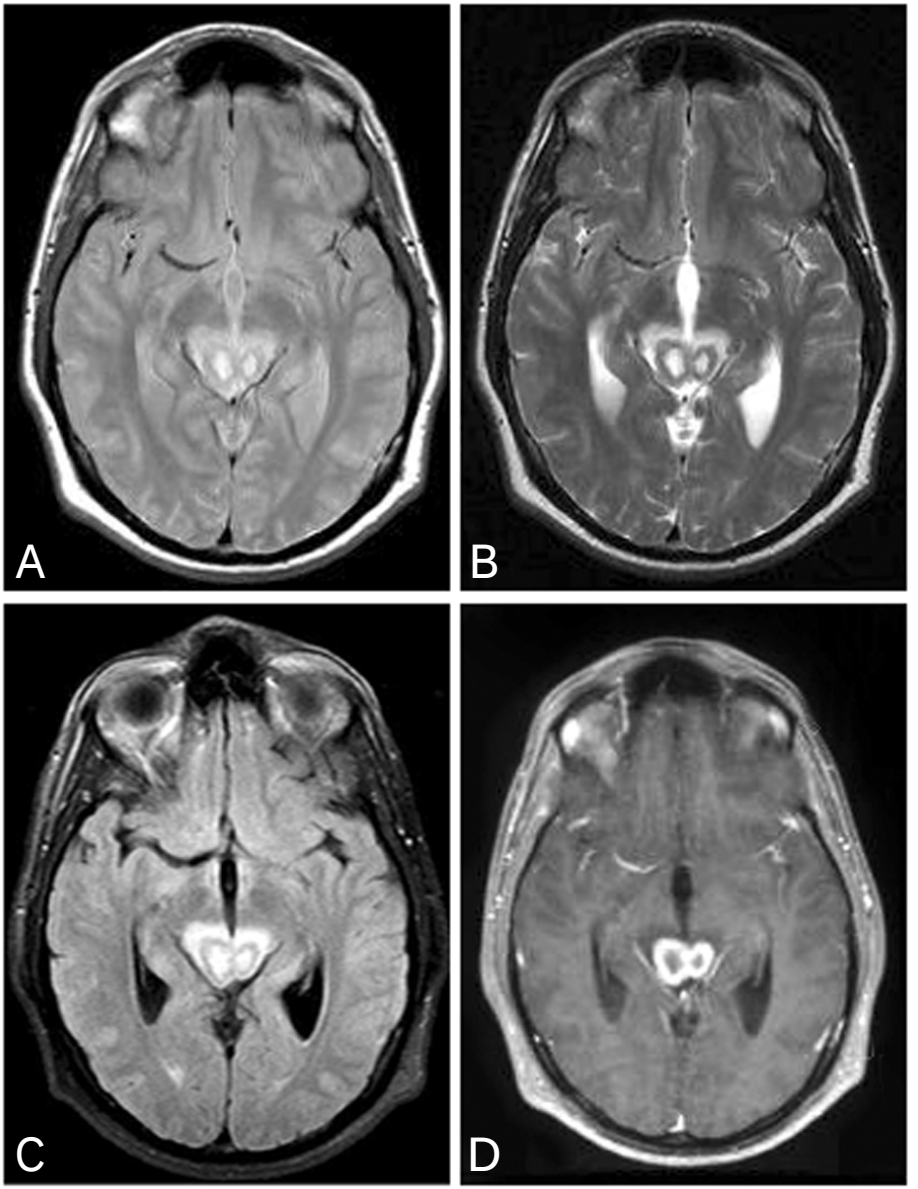


Fig. 1 (July 4, 2002)

Axials
(A) Proton Density
(B) T2
(C) Flair
(D) T1 – Gado

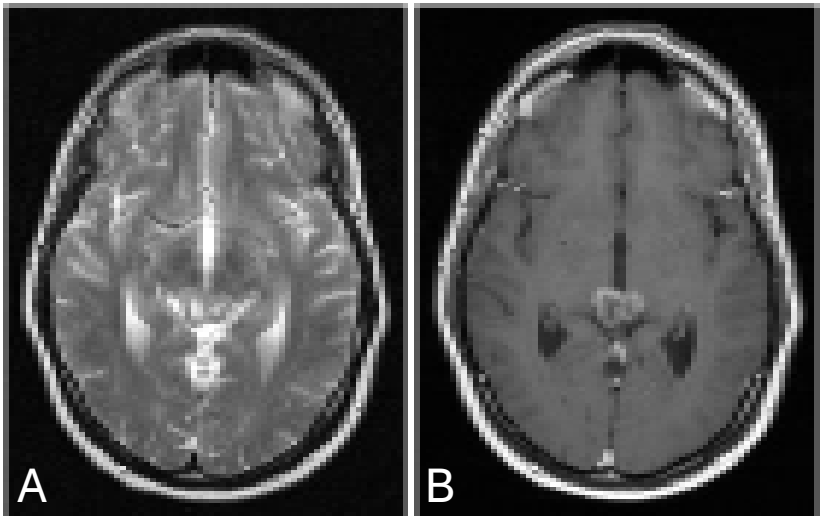


Fig. 2 (September, 2002)
(A) T2 (B) T1-Gado

Because of the general opinion of lymphoma, he was given a trial of cortisone and the lesion decreased over a period of 2 weeks. Figure 2

The cortisone was tapered and stopped but on the follow-up exam one month later the lesion had resumed its original size and it increased in the following weeks with more edema. A biopsy was then planned and realized through a frontal transventricular approach, revealing on pathology a granulomatous infection with PCR compatible with Wipple's disease. Figure 4.

Further investigations did not substantiate this diagnosis so that specific treatment was not initiated. One month later, the lesion had grown further and forced medical consultants to agree to treatment. Figure 3

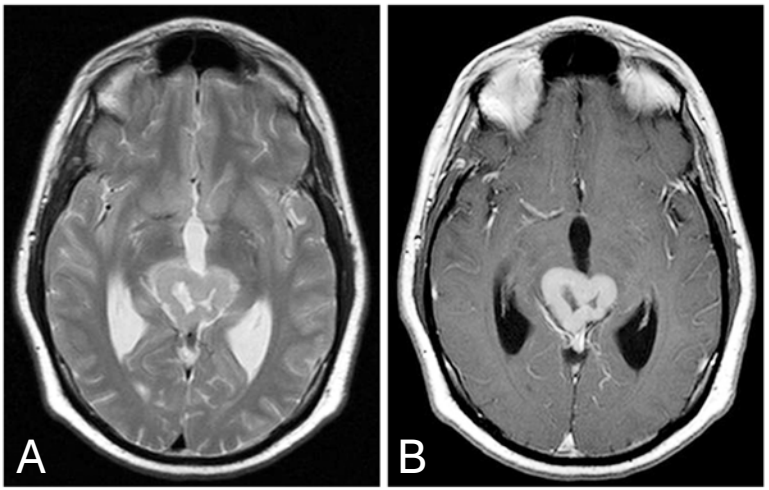
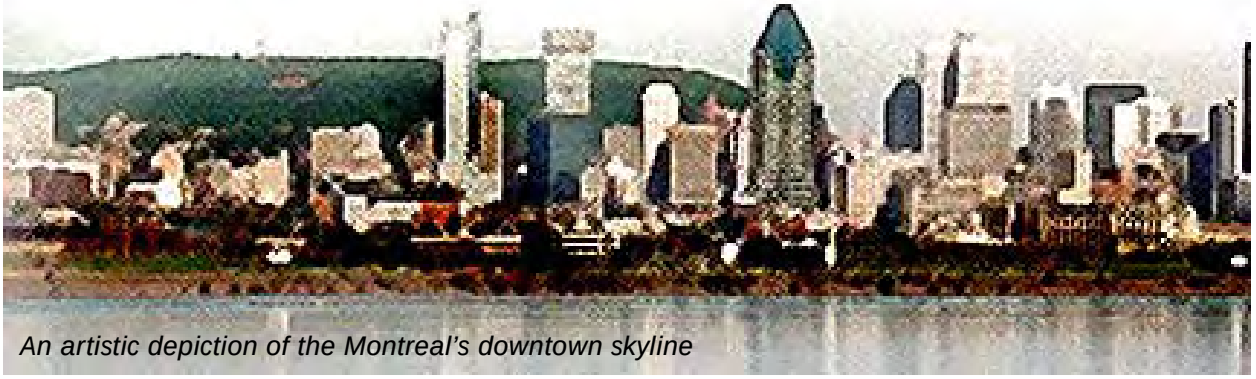


Fig. 3 (October, 2002)
(A) T2 (B) T1-Gado



An artistic depiction of the Montreal's downtown skyline

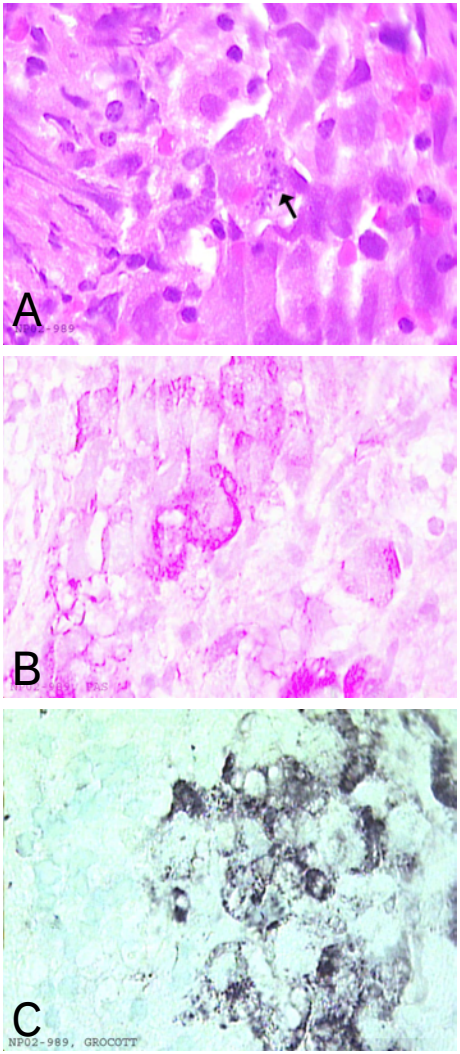
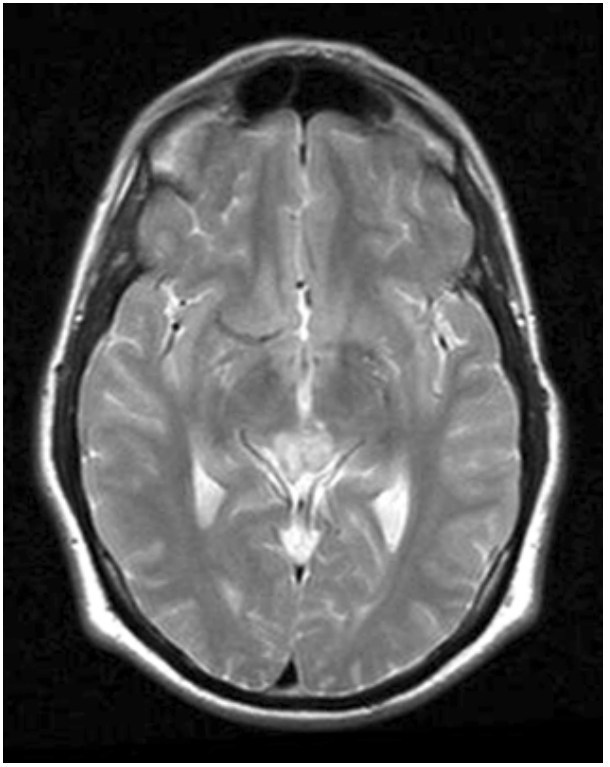


Fig. 4

Hematoxylin/eosin stain shows epithelioid type cells with sightly vacuolated eosinophilic cytoplasm and large nuclei. One cell contains small rod like structures with indistinct borders (figure A). These cells present a strong cytoplasmic reactivity with the PAS stain (figure B). Grocoot stain reveals an intracytoplasmic positivity within the PAS positive cells (figure C). Immunohistochemistry to further characterized these cells showed the cells to be positive for CD68 (macrophage type cell marker), negative for cytokeratin, LCA, GFAP and CD1a. FITE stain for mycobacterium and Gram stain were negative. These findings are compatible with the histological diagnosis of cerebral Whipple's disease.

In order to confirm the diagnosis, less than 300µl of intra-ventricular fluid removed during surgery and CSF were sent for molecular diagnosis. PCR using specific primers for T. Whippellii was negative. PCR using universal bacterial primers revealed the presence of a very faint band for 16SrRNA but sequencing was not possible. Immunohistochemistry for T. Whippellii was performed on the section and was negative (courtesy of Dr. Leipidi, Marseille, France). Electron microscopy performed on deparaffinized tissue was inconclusive. An intestinal biopsy was performed and showed no pathology. PCR was also negative.

Ref: Scandinavian Journal of infection Diseases, 1999, 31, 411-4.



Three months later, a repeat MR showed the lesion to have decreased significantly. A recent MR exam shows disappearance of enhancement.

We submit that the pathological process is one similar to Whipple's as far as the etiological agent is concerned but not firmly documented, and are happy to see that the patient has responded to the treatment.

We welcome your comments.

Fig. 5 (March, 2003)

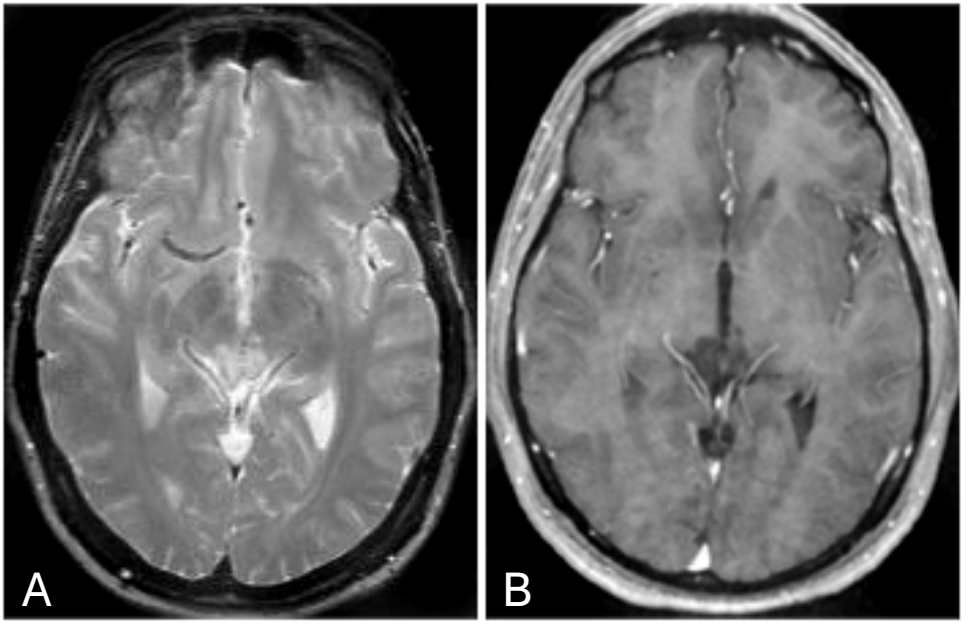
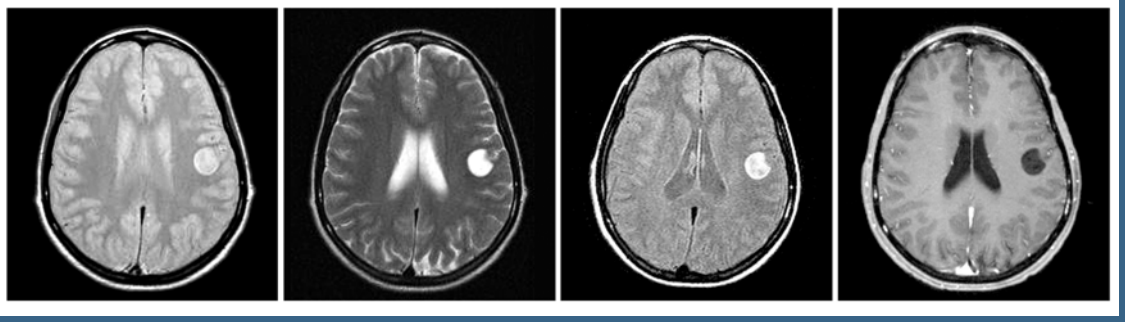


Fig. 6 (July, 2003)

In the issue of April 2001, I announced that Neuro Image would be on the Web and could be reached at mni.mcgill.ca/publications. This is still the case.

And again, I wish to tell everyone that I have created a group on MSN.COM named NEURO STUDY CLUB. The access is http://groups.msn.com/NeuroStudyClub.

As for the challenge of November 2002, the answer is a pilocytic astrocytoma



PD *T2* *Flair* *T1-GADO*

Saint Joseph Oratory

23rd International Congress of Radiology

June 25 - 29, 2004
Palais des Congres de Montreal

Best regards
Respetos
Amicalement
Saluti affettuosi
Filika
Afectuosamente
Saudações
Namaste
Herzliche Gruesse
O Genki De
As-salaam alaykum
Cordialmente

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