

Clinical Image

Cytotoxic Lesion of the Corpus Callosum: A Case of Metabolic Disease in a New Mother

Francesca R Fusco^{1*}, Mirko Bizzaglia² and Giacomo Luccichenti²

¹Neurology Day Hospital 4, Fondazione Santa Lucia, Rome, Italy

²Department of Radiology, Fondazione Santa Lucia, Rome, Italy

Abstract

Cytotoxic lesions of the corpus callosum (CLOCCs) represent an array of different conditions involving the corpus callosum. CLOCCs do not demonstrate definite signs or symptoms of hemispheric disconnection, such as alien hand syndrome, pseudo-neglect, apraxia of the left hand, agraphia, alexia, and visual apraxia. In fact, symptoms are generally related to the primary cause of the cytotoxic lesion, such as pharmaceutical agents, malignancies, infections, metabolic disorders, trauma, and others.

Keywords: Cytotoxic lesions of the corpus callosum; Metabolic disease; Visual apraxia

Clinical Image Description

A 26-year-old woman with clinical history of depression that had been treated with SSRI for a limited period of time, and endometriosis, presented in our outpatient clinic reporting a headache and non-specified visual problems. About a month earlier, she had an access to the ER where she presented 10 days after giving birth to two twins, with throbbing headache, intermittent amaurosis, and syncope.

She suffered from gestosis with gestational diabetes and hypertension and had no previous history of migraine [1]. Neurological examination showed fixed mydriasis and postural balance disorder.

Brain CT scan was unremarkable. MRI showed an oval-shaped, ill-defined lesion hyperintense in T2w and DWI, without enhancement after gadolinium injection in T1w images, in the splenium of corpus callosum, which was swollen [2].

*Corresponding author: Francesca R Fusco, Neurology Day Hospital 4, Fondazione Santa Lucia, Rome, Italy; Email: f.fusco@hsantalucia.it

Citation: Fusco FR, Bizzaglia M, Luccichenti G (2023) Cytotoxic Lesion of the Corpus Callosum: A Case of Metabolic Disease in a New Mother. J Clin Stud Med Case Rep 10: 208.

Received: November 16, 2023; **Accepted:** November 28, 2023; **Published:** December 05, 2023

Copyright: © 2023 Fusco FR, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

At discharge, the patient displayed balance and subjective visual disturbances (Figure 1). Follow-up MRI showed a reduction in lesion size, although MR spectroscopy showed a decrease in metabolites levels in the splenium compared to the genu of CC (Figure 2).

Sustained hypoglycemia occurring during labor could be responsible for the lesion in the CC, due to release of inflammatory cytokines which leads to massive increase of glutamate in extracellular fluid and cytotoxic edema.

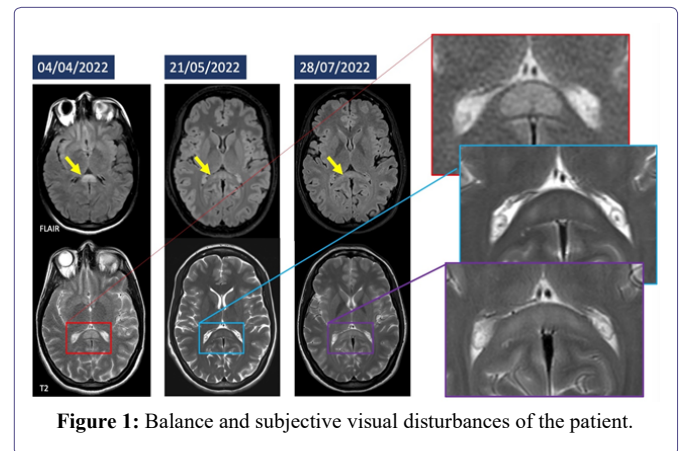


Figure 1: Balance and subjective visual disturbances of the patient.

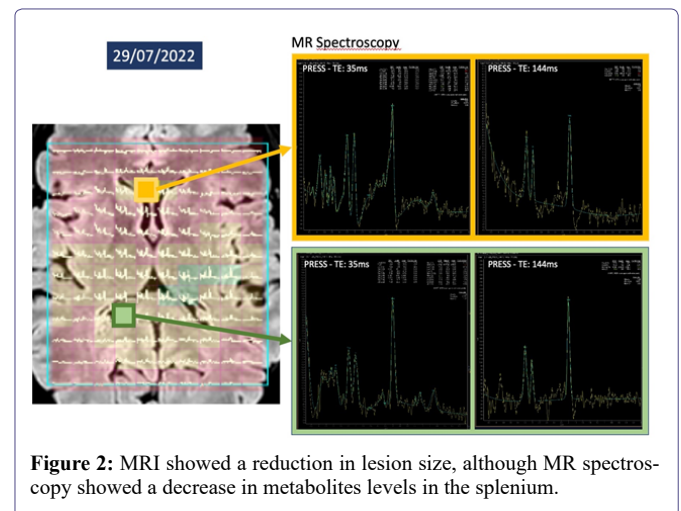


Figure 2: MRI showed a reduction in lesion size, although MR spectroscopy showed a decrease in metabolites levels in the splenium.

Acknowledgement

partially funded by ricerca corrente linea 2, italian ministers of Health.

References

1. Lewis R, Ruiz A, Monteith T (2020) Reversible Lesion of the Corpus Callosum in a Patient With Migraine With Aura: A Case Study Headache. 60: 791-792.
2. Tetsuka S (2019) Reversible lesion in the splenium of the corpus callosum. Brain Behav. 9: e01440.



- Advances In Industrial Biotechnology | ISSN: 2639-5665
- Advances In Microbiology Research | ISSN: 2689-694X
- Archives Of Surgery And Surgical Education | ISSN: 2689-3126
- Archives Of Urology
- Archives Of Zoological Studies | ISSN: 2640-7779
- Current Trends Medical And Biological Engineering
- International Journal Of Case Reports And Therapeutic Studies | ISSN: 2689-310X
- Journal Of Addiction & Addictive Disorders | ISSN: 2578-7276
- Journal Of Agronomy & Agricultural Science | ISSN: 2689-8292
- Journal Of AIDS Clinical Research & STDs | ISSN: 2572-7370
- Journal Of Alcoholism Drug Abuse & Substance Dependence | ISSN: 2572-9594
- Journal Of Allergy Disorders & Therapy | ISSN: 2470-749X
- Journal Of Alternative Complementary & Integrative Medicine | ISSN: 2470-7562
- Journal Of Alzheimers & Neurodegenerative Diseases | ISSN: 2572-9608
- Journal Of Anesthesia & Clinical Care | ISSN: 2378-8879
- Journal Of Angiology & Vascular Surgery | ISSN: 2572-7397
- Journal Of Animal Research & Veterinary Science | ISSN: 2639-3751
- Journal Of Aquaculture & Fisheries | ISSN: 2576-5523
- Journal Of Atmospheric & Earth Sciences | ISSN: 2689-8780
- Journal Of Biotech Research & Biochemistry
- Journal Of Brain & Neuroscience Research
- Journal Of Cancer Biology & Treatment | ISSN: 2470-7546
- Journal Of Cardiology Study & Research | ISSN: 2640-768X
- Journal Of Cell Biology & Cell Metabolism | ISSN: 2381-1943
- Journal Of Clinical Dermatology & Therapy | ISSN: 2378-8771
- Journal Of Clinical Immunology & Immunotherapy | ISSN: 2378-8844
- Journal Of Clinical Studies & Medical Case Reports | ISSN: 2378-8801
- Journal Of Community Medicine & Public Health Care | ISSN: 2381-1978
- Journal Of Cytology & Tissue Biology | ISSN: 2378-9107
- Journal Of Dairy Research & Technology | ISSN: 2688-9315
- Journal Of Dentistry Oral Health & Cosmesis | ISSN: 2473-6783
- Journal Of Diabetes & Metabolic Disorders | ISSN: 2381-201X
- Journal Of Emergency Medicine Trauma & Surgical Care | ISSN: 2378-8798
- Journal Of Environmental Science Current Research | ISSN: 2643-5020
- Journal Of Food Science & Nutrition | ISSN: 2470-1076
- Journal Of Forensic Legal & Investigative Sciences | ISSN: 2473-733X
- Journal Of Gastroenterology & Hepatology Research | ISSN: 2574-2566
- Journal Of Genetics & Genomic Sciences | ISSN: 2574-2485
- Journal Of Gerontology & Geriatric Medicine | ISSN: 2381-8662
- Journal Of Hematology Blood Transfusion & Disorders | ISSN: 2572-2999
- Journal Of Hospice & Palliative Medical Care
- Journal Of Human Endocrinology | ISSN: 2572-9640
- Journal Of Infectious & Non Infectious Diseases | ISSN: 2381-8654
- Journal Of Internal Medicine & Primary Healthcare | ISSN: 2574-2493
- Journal Of Light & Laser Current Trends
- Journal Of Medicine Study & Research | ISSN: 2639-5657
- Journal Of Modern Chemical Sciences
- Journal Of Nanotechnology Nanomedicine & Nanobiotechnology | ISSN: 2381-2044
- Journal Of Neonatology & Clinical Pediatrics | ISSN: 2378-878X
- Journal Of Nephrology & Renal Therapy | ISSN: 2473-7313
- Journal Of Non Invasive Vascular Investigation | ISSN: 2572-7400
- Journal Of Nuclear Medicine Radiology & Radiation Therapy | ISSN: 2572-7419
- Journal Of Obesity & Weight Loss | ISSN: 2473-7372
- Journal Of Ophthalmology & Clinical Research | ISSN: 2378-8887
- Journal Of Orthopedic Research & Physiotherapy | ISSN: 2381-2052
- Journal Of Otolaryngology Head & Neck Surgery | ISSN: 2573-010X
- Journal Of Pathology Clinical & Medical Research
- Journal Of Pharmacology Pharmaceutics & Pharmacovigilance | ISSN: 2639-5649
- Journal Of Physical Medicine Rehabilitation & Disabilities | ISSN: 2381-8670
- Journal Of Plant Science Current Research | ISSN: 2639-3743
- Journal Of Practical & Professional Nursing | ISSN: 2639-5681
- Journal Of Protein Research & Bioinformatics
- Journal Of Psychiatry Depression & Anxiety | ISSN: 2573-0150
- Journal Of Pulmonary Medicine & Respiratory Research | ISSN: 2573-0177
- Journal Of Reproductive Medicine Gynaecology & Obstetrics | ISSN: 2574-2574
- Journal Of Stem Cells Research Development & Therapy | ISSN: 2381-2060
- Journal Of Surgery Current Trends & Innovations | ISSN: 2578-7284
- Journal Of Toxicology Current Research | ISSN: 2639-3735
- Journal Of Translational Science And Research
- Journal Of Vaccines Research & Vaccination | ISSN: 2573-0193
- Journal Of Virology & Antivirals
- Sports Medicine And Injury Care Journal | ISSN: 2689-8829
- Trends In Anatomy & Physiology | ISSN: 2640-7752

Submit Your Manuscript: <https://www.heraldopenaccess.us/submit-manuscript>