

WRITING CASE REPORTS

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PURPOSE OF CASE REPORTS

- Impart important, new knowledge
- Describe
 - Unique or nearly unique cases
 - New diseases or syndromes
 - Unexpected associations
 - Unexpected events (good or bad), eg, side effects of drugs
 - New diagnostic techniques or treatment options

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HOW DO READERS USE CASE REPORTS?

- To corroborate others' findings
 - May suggest additional studies
- As teaching tools, eg,
“Case Records” (*NEJM*), “Clinician’s Corner” (*JAMA*)

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REASONS FOR REJECTION

- Unoriginal observation
 - Verify uniqueness by a thorough literature search
- Unacceptable length
- Poor writing
- Wrong audience
 - Review author instructions and sample articles
- Grandiose statements of clinical implications
- Sweeping generalizations

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INTRODUCTION

- Should consist of 1 to 3 paragraphs
- Use present tense

Include

- Background (brief statement)
- Other cases immediately relevant to yours
- Search strategy (or mention in discussion)
- Purpose
 - Describe the case briefly
 - Give reasons why the case should be reported
 - Do not review the general topic in detail. Instead, focus on the reasons why the case is unique or important

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CASE REPORT: SAMPLE INTRODUCTION

“To be struck by lightning is unusual. For a pregnant woman to be struck by lightning is a rarity. For a pregnant woman to be struck by lightning during the first trimester of pregnancy and then to continue through a normal pregnancy to deliver a normal infant, remains to be recorded. This is an account of such an event.”

From *Ann Int Med*, 1960s.

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CASE DESCRIPTION

- Write in past tense
- Write in past perfect tense (“had”) if an event preceded the current illness
- Avoid flashbacks, unless necessary
- Focus on information that is relevant to the case; do not try to include everything in the patient’s history and physical

KEEP INFORMATION RELEVANT

CASE DESCRIPTION

- Include information essential to the report, eg,
 - Demographic info
 - Always includes patient age and sex
 - May also include race, ethnic origin, and occupation (when pertinent)
 - Patient's primary symptoms or reasons for referral
 - Brief medical history
 - stick to details that are most relevant to patient's current condition
 - make time sequence of events as clear as possible

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CASE DESCRIPTION

- Include information essential to the report (cont.)
 - Physical examination results
 - Lab test results
 - Other test results
 - For all results, give precise data—not “within normal limits”
 - Focus on positive results and only the most relevant negative results
 - Treatment
 - Give exact dosages of drugs
 - Outcome
 - Include patient’s status at most recent follow-up

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CASE DESCRIPTION

- Some elements can be described in independent sections of the report if they are particularly important and detailed, eg,
 - Diagnosis (if the diagnostic technique used is the focus of the report, eg, a new application of 64-slice computed tomography)
 - Surgical Technique (if the focus of the report is a new or unusual operation or surgical tool)

CASE DESCRIPTION

- Maintain patient confidentiality
 - Do not use patient initials
 - Get permission for photographs
 - Obtain permission to publish (HIPAA*)
- Use illustrations, tables, and graphs

* Health Insurance Portability and Accountability Act of 1996

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Discussion/Comment

- Focus on the case's significance or uniqueness
- Discuss the relationship of your observations to pertinent scientific literature
- Review your evidence for accuracy of the observation
- Summarize
- References

SAMPLE CASE REPORT

Messner et al. Congenital Absence of Anterior Pericardium at Left Ventricular Assist Device Implantation. *Tex Heart Inst J* 2004;31(1):87-9.

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CHOOSING YOUR WORDS



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KEEP THE PATIENT IN MIND

“Surgeons must be very careful when they take the knife! Underneath their fine incisions stirs the culprit — Life!”

— Emily Dickinson

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KEEP THE PATIENT IN MIND

- Seven deadly don'ts*:
 - Don't confuse patients with body parts, diseases, or procedures
 - Cyclosporine is used to treat organ transplants (patients who have received organ transplants).
 - Don't treat patients as commodities
 - We managed the patients with penicillin (managed the patients' symptoms with penicillin, or treated the patients with penicillin).

*Knatterud M. AMWA Journal (Feb. 1991).

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KEEP THE PATIENT IN MIND

- Don't blame patients for their conditions
 - The patient developed right heart failure (right heart failure developed)
 - Five patients were treatment failures (did not respond to treatment)
 - Also avoid using emotionally charged words like "victim," "suffered from," "complained of," and "denied." Use "had," "reported," etc
- Don't define patients by their disease
 - Arthritics, diabetics (Patients with arthritis, patients with diabetes)

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KEEP THE PATIENT IN MIND

- Don't use sexist language
 - The pleasant young woman complained of ...
- Don't use the article "the" to label patients, eg, the elderly (patients older than...)
- Don't use passive verbs, prepositional phrases, "that/which" clauses
 - The patient that was in renal failure was started on hemodialysis in 2005 (In 2005, the patient, who had renal failure, started hemodialysis)

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RELATED TYPES OF PAPERS

- Case Series
- Techniques/Methods/How To Do It
- Images in (Cardiovascular Medicine, Cardiothoracic Surgery, etc)

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CASE SERIES

- Describe a small set of cases
- Report the same information for each case
- From the series, form generalizations and conclusions about anatomic, etiologic, epidemiologic, pathologic, diagnostic, or therapeutic aspects of a disease
- Suggest experimental or statistical studies

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TECHNIQUE OR METHODS PAPER

- Describe an innovative technique, instrument, or method
- Keep it brief
- Focus on methods (detailed)
 - Use illustrations
- Submit to “Clinical Notes,” “The Surgeon at Work,” “How I Do It,” etc

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TECHNIQUE OR METHODS PAPER

Learn the format.

- Short introduction
- Technique
 - Describe new technique, technology, or method
- Discussion
 - Explain value
 - Give author's experience

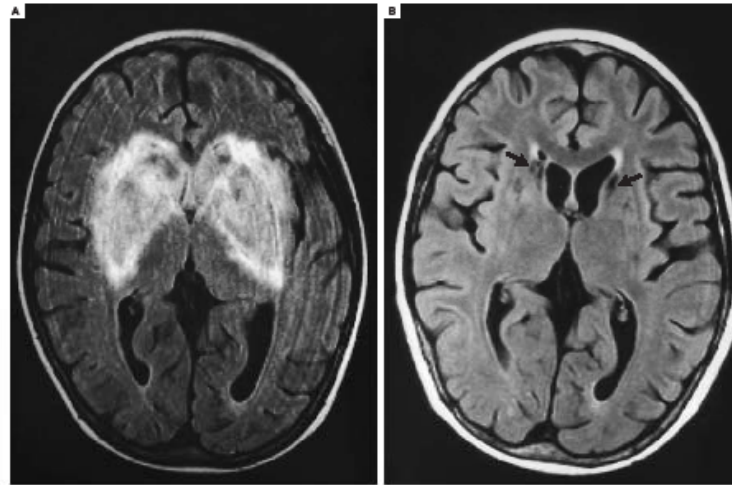
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IMAGES

Learn the format

- Read the authors' instructions
- Write a VERY brief case report (ie, just a few paragraphs)
 - Present relevant clinical information
 - Include a short description of the patient's history, relevant physical and laboratory findings, clinical course, response to treatment (if any), and condition at last follow-up
- Label all structures in the image and describe the labels in the legend or in the text, which may serve as the legend

Bilateral Striatal Necrosis Associated with *Mycoplasma pneumoniae* Infection



Miriam van Buijen, M.D.
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FEVER AND NEUTROPENIA DEVELOPED IN A 14-YEAR-OLD GIRL AFTER SHE received intensive chemotherapy for her third relapse of pre-B-cell acute lymphocytic leukemia, including intrathecal therapy with methotrexate, cytarabine, and prednisone. She had headache, nausea, and photophobia and became increasingly confused and somnolent; a chest radiograph showed an interstitial pattern. A T₂-weighted magnetic resonance imaging (MRI) scan of her skull (with fluid-attenuated inversion recovery) showed high-signal lesions involving all basal ganglia except the thalami (Panel A). The cerebrospinal fluid protein level was markedly increased. A polymerase-chain-reaction assay for *Mycoplasma pneumoniae* in cerebrospinal fluid was negative. Although the serum IgM antibody titer rose to 1:16 within a four-week period, the IgG level was undetectable (<10 U per liter). She was treated with doxycycline. The interstitial pattern on chest radiographs persisted for three weeks. Transient hyperphagia developed, and then there was complete neurologic recovery. An MRI scan obtained two months later showed marked atrophy of the basal ganglia and postnecrotic defects of the caudate (Panel B, arrows). At that point, serum IgG and IgM tests were negative.

The cause of an acute onset of bilateral striatal necrosis with a favorable neurologic outcome is often unknown. We suggest that, in our severely immunocompromised patient, the bilateral striatal necrosis may have been due to *M. pneumoniae*.

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THANK YOU

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