



**TEXTUAL REPRESENTATION OF  
THE DOCTOR-PATIENT  
RELATIONSHIP: COMPARATIVE  
ANALYSIS OF 19<sup>TH</sup>-CENTURY  
AND PRESENT-DAY MEDICAL  
CASE REPORTS**

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# OUTLINE OF THE PRESENTATION

## Introduction:

1. medical case reports (MCRs)
2. theoretical frameworks
3. research questions

## Materials and Methods:

1. corpus description
2. approaches used
3. text analysis tool

## Findings:

1. 19<sup>th</sup>-century MCRs
2. present-day MCRs
3. impact of Medicine 2.0

## Conclusions

## Questions



# INTRODUCTION

## 1. Published MCRs as a genre:

- description of a pathology (its diagnosis and treatment) in a **single** patient
- **interesting/new** aspects of a case (expressed in introductions/titles with *novel, rare, or unusual*)
- regarded as **inferior** to the research article (MCRs are based on 1 patient, RAs on clinical trials)



# INTRODUCTION

## 2. Theoretical frameworks

- critical analysis of MCRs drawing on work in **sociology** (Anspach 1988), **literary theory** (Montgomery Hunter 1992), and **medicine** (Sobel 2000)
- diachronic perspective on medical writing from **linguistics** (Taavitsainen and Pahta 2000, Atkinson 1992, Salager-Meyer and Defives 1998)
- the concept of Medicine 2.0 from **information technology** (Eysenbach 2008)



# INTRODUCTION

## 3. Research questions

- Given the different contextual and historical variables (such as growing technologization of medicine and the Internet), in what way has the **textual representation** of patients in MCRs changed?
  - How were patients textually represented in 19<sup>th</sup>-century MCRs by the authors (i.e. their physicians)?
  - How are they represented at present?



# MATERIALS AND METHODS

## 1. Corpus description:

### Corpus of present-day MCRs (ca. 2 million words)

- 1,121 on-line MCRs (2007 – 2010) from:
  - *Journal of Medical Case Reports*
  - *Cases Journal*
- criteria: English, open access, representativeness

### Corpus of 19<sup>th</sup>-century MCRs (13,734 words)

- 12 MCRs (1840 – 1895) from:
  - *Provincial Medical & Surgical Journal*  
(at present *British Medical Journal*)
- criteria: English, oldest possible, representativeness



# MATERIALS AND METHODS

## 2. Approaches used:

- Objectifying rhetorical features in present-day MCRs - “**biomedical rhetoric**” (Anspach 1988)
- Specific features of 19<sup>th</sup>-century MCRs - “**rhetoric of personal experience**” (Atkinson 1992)
- The concept of **Medicine 2.0** (Eisenbach 2008) and its impact on case-reporting



# MATERIALS AND METHODS

## 3. Text analysis tool:

TextSTAT 2.5 concordance software tool used for generating:

- word frequencies
- concordances





TextSTAT - TITLES OF MCRs - both journals.crp

Corpus Export Language Encoding ?

Corpus Word forms Concordance Citation

presenting Search Query editor

Concordance

in a newborn black female: a case report Severe vitamin D deficiency	PRESENTING as hypocalcaemic seizures in a black infant at 45.5 degrees south: a
ma of the colon: a case report Rare ileal localisation of angiolipoma	PRESENTING as chronic haemorrhage and severe anaemia: a case report Metastatic r
case report and review of literature Limited Wegener's granulomatosis	PRESENTING as lung nodules in a patient with rheumatoid arthritis: a case report
al presentation of Hodgkin lymphoma: a case report Water intoxication	PRESENTING as maternal and neonatal seizures: a case report Mesenteric panniculi
rotropic gastric mucosa: a case series Light chain deposition disease	PRESENTING as paroxysmal atrial fibrillation: a case report Marathon related dea
report Multicentric Castleman's disease: a case report Dacryocystitis	PRESENTING as post-septal cellulitis: a case report Life-saving automated extern
in the treatment of pseudoarthrosis: a case report Folate deficiency	PRESENTING as pyrexia: a case report Pneumothorax, pneumomediastinum and subcuta
ild with undiagnosed crohn disease: A case report Gliomatosis cerebri	PRESENTING as rapidly progressive dementia and parkinsonism in an elderly woman:
susception and chronic ischaemia: a case report Nuschausen's syndrome	PRESENTING as rectal foreign body insertion: a case report Sclerosing mesenterit
e to non-fatal amniotic fluid embolism: a case report Cystic fibrosis	PRESENTING as recurrent pancreatitis in a young child with a normal sweat test a
y the left parietal bone: a case report Chronic granulomatous disease	PRESENTING as retinal mass Hypohalemic Periodic Paralysis: a case report and rev
on mimicking aortic dissection: a case report Hyperkalemic paralysis	PRESENTING as ST-elevation myocardial infarction: a case report Pre-operative di
therapeutic doses: a case report Incarcerated transesophageal hernia	PRESENTING in a 60-year-old man: a case report Calcific myofibrosis due to penta
se report Optic atrophy, necrotizing anterior scleritis and keratitis	PRESENTING in association with Streptococcal Toxic Shock Syndrome: a case report
oley catheter for long-term drainage of neuropathic bladder? Pyometra	PRESENTING in conjunction with bowel cancer in a post-menopausal woman: a case r
pyohyoid membrane: a case report Atypical haemolytic uraemic syndrome	PRESENTING initially as suspected meningococcal disease: a case report Minimal c
metastatic malignant melanomas: a case report Splenic rupture as the	PRESENTING manifestation of primary splenic angiosarcoma in a teenage woman: a c
report Idiopathic pneumonia syndrome after bone marrow transplantation	PRESENTING with "crazy-paving" pattern on high-resolution computed tomography: a
l dominant endosteal hyperostosis: a case series Pelvic actinomycosis	PRESENTING with a large abscess and bowel stenosis with marked response to conse
rt and review of the literature Transfusion related acute lung injury	PRESENTING with acute dyspnoea: a case report A pitfall in the interpretation of
islocation: a case report Human immunodeficiency virus seroconversion	PRESENTING with acute inflammatory demyelinating polyneuropathy: a case report A
review of literature A patient with glycogen storage disease type Ib	PRESENTING with acute myeloid leukemia (AML) bearing monosomy 7 and translocatio
th hepatic artery pseudoaneurysm: a case report Systemic tuberculosis	PRESENTING with acute transient myopia: a case report Pleomorphic adenoma of the
globulinaemia (Good's syndrome) Metastatic non-small cell lung cancer	PRESENTING with an orbital metastasis: a case report Apocrine adenocarcinoma of
gn of congenital obstructive anomaly: a case report Esophageal cancer	PRESENTING with atrial fibrillation: A case report Exudative pleurisy of cocci
elling and shoulder dysfunction: a case report A postmenopausal woman	PRESENTING with atypical symptoms and cervical cancer: a case report Bronchial c
echnique: a case report and literature review Guillain-Barré Syndrome	PRESENTING with bilateral facial nerve paralysis: a case report Congenital diaph
agement dilemma: a woman with cystic fibrosis and severe lung disease	PRESENTING with colonic carcinoma: a case report Appearance of a double bubble i
orts and a review of the literature Adrenocortical oncocytic neoplasm	PRESENTING with Cushing's syndrome: a case report Sinusoidal obstruction syndrom
report Symplastic scrotal leiomyoma: a case report Testicular seminoma	PRESENTING with duodenal perforation: a case report Retention of foreign body in
avity: case report Primary malignant melanoma of the lower oesophagus	PRESENTING with dysphagia and upper gastrointestinal bleeding Constrictive peric
fter transhiatal oesophagectomy: a case report A postmenopausal woman	PRESENTING with Ekbohm syndrome associated with recurrent depressive disorder: a
se series Pneumothorax, pneumomediastinum, tracheo-oesophageal fistula	PRESENTING with endotracheal intubation in post-caesarean period: A case report C

Options

- search whole words only
- search case insensitive
- mark search string
- 70 context left
- 70 context right
- alphabetically
- sort context right
- sort context left

Refresh

80 hits | 1 files | 95383 bytes



# FINDINGS

## 1. 19<sup>th</sup>-century MCRs:

- twelve MCRs from 1840 – 1895, carefully read and analyzed
- 1840 – the year the *Provincial Medical & Surgical Journal* was established
- the end of 19<sup>th</sup> century: technologization of medicine and conventionalization of medical writing



# FINDINGS

## “Rhetoric of personal experience”:

- diary-like narrative (detailed description of the case)  
*On Tuesday, September 8<sup>th</sup>, he was carried into the operating theatre...*
- the use of present tenses  
*It is now over 10 months, since the patient came under my attention.*
- the use of first person singular  
*I regret that she was not seen, and her temperature noted, just before her death.*



## FINDINGS

- the use of quotation marks  
*...and expressed herself as “feeling as comfortable as she could expect.”*
- personalized style (the use of names or initials)  
*Dr. Broadbent, who was good enough to...*  
*JOHN P., aged 24, of medium size, light hair...*
- affective involvement – the use of emotionally charged expressions (such as *never once, really noteworthy*)  
*The really noteworthy feature of this case...*



# FINDINGS

## Summary:

- textual representation of D-P relationship via rhetoric of personal experience indicates a relatively equal position
- detailed description of cases including day-to-day progression of the patients' conditions with a large number of temporal adverbials
- MCRs contain physicians' thought processes with affective involvement (beliefs, regrets)



# FINDINGS

## 2. Present-day MCRs:

**Biomedical Rhetoric** (Anspach 1988) – objectifying rhetorical features:

- highly conventionalized language – dichotomy between patients' subjective symptoms and objective signs recorded by physicians/medical technology
- patients' personal narratives are “translated” into scientific reports, leaving out a considerable amount of possibly important information



## FINDINGS

4 categories of **objectifying rhetorical features**:

- **depersonalization**: absence of reference to the patient, the use of impersonal vocabulary and conventionalized collocations – the focus on the patient is backgrounded

categories: *A 19-year-old Thai primigravida...*

disease/organ: *The abdomen was not distended...*

referentless phrases: *positive for, unremarkable*



# FINDINGS

- **omission of agents:** via the use of passives and existential constructions – agents are de-emphasized, focus is on the action

existential constructions: *There was no abnormality...*

passives: *MRI of the pelvis was performed...*

- **metonymy:** technology as the agent – regarded as objective despite being subject to interpretation

*Histopathology revealed ....*

*Skin biopsy demonstrated...*





# FINDINGS

- **factive and non-factive predicates:** factive verbs (used with doctors/authors) presuppose the truth of what follows, while non-factive verbs (used with patients) may not do so

factive verbs: *It was found that the patient had a tumor.*  
(presupposing the truth of that-clause, information is presented as objective)

non-factive verbs: *She denied recent weight loss.*

(the possibility is left open whether she lost weight, information is presented as subjective perceptions)



# FINDINGS

## Summary:

- textual representation of D-P relationship via biomedical rhetoric indicates an unequal position
- “categorizing what the patient says as ‘subjective’ stigmatizes the patient’s testimony as untrustworthy... calling physical findings and laboratory studies ‘objective data’ gives an air of infallibility to the quite fallible observations of doctor and laboratory”  
(Donnelly cited in Fleischman 2008: 478)



# FINDINGS

## 3. Impact of Medicine 2.0:

Basic principles of Medicine 2.0:

- social networking – personal experience with treatment e.g. *PatientsLikeMe*
- participation – active involvement of patients
- apomediation – online sources of information, not only from experts
- collaboration – different groups working together
- openness – open-access publishing



# FINDINGS

## Summary:

- the *patient's perspective* section – part of the genre
- information is free and accessible
- different modes of communication – different platforms
- published report can be commented and updated



# FINDINGS

## Patient as a Co-Author (JMCR 4/1/181)

### Patient's perspective

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I write the following to provide assistance to the case report written about my operation. I have no medical knowledge or background so I only write from my own perspective and experience.

Before the morning I was taken to hospital I had never experienced abdominal pains, either related to my menstrual cycle or other. I had never been submitted to hospital for any previous health concerns. It was the summer after my first year at University, I was working as a full time Assistant Director, working long hours, the job was very active and predominantly outdoors (it was an outdoor production). I was 19 years old. At the time of being submitted to hospital I was on the third day of my period, at this age I experienced regular monthly periods lasting seven days. I awoke very early on that morning with no pain. I then went back to sleep but was awoken with a severe pain in my abdomen. I also felt very hot, dizzy and clammy. I tried to recover by taking a cool bath, drinking water and then lying flat on the floor breathing deeply. This did not help and the pain began to increase to an unbearable level. An ambulance was called for, whilst waiting for them I continued to lie flat on the cool bathroom floor with the windows open.

When the ambulance arrived the ambulance woman asked if I was possibly pregnant. I said no, there was no possibility of this. They then made the presumption that it was due to drug or



# CONCLUSIONS

## DIFFERENCES ACROSS TIME

### MCRs of 1840-1895

- non-professionalized
- affective involvement
- personal experience
- absent structure
- single author
- subjective narration

### MCRs of 2007-2010

- highly specialized
- detachment
- objectification
- explicit structure
- multiple authors
- conventionalized report



# CONCLUSIONS

## 19<sup>th</sup>-century MCRs:

- non-conventionalized, rhetoric of personal experience
- affective involvement of the author, focus on patient

## Present-day MCRs:

- conventions of 'biomedical rhetoric'
- objectifying discourse strategies, focus on pathology

## Impact of the Internet and Medicine 2.0:

- databases, open access, new modes of communication
- patient's voice via patient's perspective section



# THANK YOU FOR YOUR ATTENTION. QUESTIONS?

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