

Effective Medical Writing

Pointers to getting your article published

Peh W C G, Ng K H

Writing a pictorial essay

ABSTRACT

A pictorial essay is a type of educational article that aims to provide both textual and visual portrayals of a topical issue. It usually consists of a short unstructured abstract, brief introduction, subheadings to organise the material and a summary. The number of references is limited to a few key articles, typically, eight to 15, or fewer. The text is usually short, often approximately 1,000 to 2,000 words in length, with much of the message contained in the figure legends. This type of article allows for a large number of figures, typically up to 20 figures or 30 figure parts. The main criteria for publication are currency, educational value and high quality of illustrations.

Keywords: figures, illustrations, medical writing, pictorial essay, scientific paper

Singapore Med J 2010;51(3): 186-189

INTRODUCTION

Pictorial essays, also known as pictorial reviews, are teaching articles that rely mainly on the quality and educational value of its images and their accompanying legends. Therefore, in contrast to many other article categories, the length of text is limited and there are usually many figures. The message conveyed should be current and practical, and should not introduce any new information. Although this article category is often found in radiology journals, many other journals, including the Singapore Medical Journal, also publish pictorial essays. Pictorial essays, through its numerous illustrations, aim to provide visual information in an attractive way to the readers.

Pictorial essays are often based on educational exhibits or posters that have been presented at major scientific meetings. One important reason for authors aiming to convert their posters into pictorial essays is that their material gets transformed from being merely transient

displays to being part of the body of published medical knowledge. As pictorial essays are one of many types of articles that appear in medical journals, authors need to be aware of the specific requirements for their preparation, and whether a particular journal publishes this category of articles. Similar to all other manuscript types, the submitted manuscript for a pictorial essay should also be constructed exactly according to the prescribed guidelines set by the target journal, which can usually be found in the journal's Instructions to Authors.⁽¹⁾

STRUCTURE AND CONTENTS OF A PICTORIAL ESSAY

Pictorial essays should consist of the following headings: unstructured abstract, brief introduction and subheadings to organise the topic in a logical manner. There may be an optional discussion section. There should be a summary at the end of the article. Unlike original articles, pictorial essays do not follow the IMRAD structure of manuscript organisation.

Box 1. Structure of a pictorial essay:

- Title
- Unstructured abstract
- Short introduction
- Subheadings to organise material
- Discussion (optional)
- Summary
- References (limited number)
- Illustrations (large number)

The title should be short, attractive and informative, and should accurately convey to the reader the contents of the pictorial essay in as few words as possible.⁽²⁾ Some examples of pictorial essay titles published in the Singapore Medical Journal over the past two years include:

- Gastrointestinal tuberculosis
- Breast calcifications: which are malignant?
- Radiographical approach to jaw lesions

Singapore Medical Journal,
2 College Road,
Singapore 169850

Peh WCG, MD, FRCP,
FRCR,
Advisor

Biomedical Imaging and Interventional Journal,
c/o Department of Biomedical Imaging,
University of Malaya,
Kuala Lumpur 50603,
Malaysia

Ng KH, PhD, MIPEM,
DABMP,
Editor

Correspondence to:
Prof Wilfred CG Peh
Tel: (65) 6379 3293
Fax: (65) 6379 3944
Email: wilfred.peh@gmail.com

- Computed tomography of blunt abdominal trauma in children
- Ultrasonographical diagnosis of acute gynaecological pain
- Magnetic resonance imaging of variants of the knee

The abstract is usually unstructured. Abstracts for pictorial essays are almost always shorter than for original research articles, and are typically limited to 75–150 words. The abstract should concisely summarise the contents of the pictorial essay, and contain sufficient information to be a stand-alone entity. The introduction should be brief, typically one to two paragraphs long, and provide background information about why the authors had chosen to address the topic in a pictorial essay and its relevance in current clinical practice. The teaching objectives of the pictorial essay should be stated at the end of the introduction section.

Unlike original articles or case reports, the main body of the text usually does not have standard headings, e.g. IMRAD for original articles. Subheadings are used to organise the topic in a logical way, with these subheadings chosen according to the subject matter. The text is usually short, and should follow a prescribed word limit, typically approximately 1,000–2,000 words, according to the individual journal's Instructions to Authors. The main body of the text typically ends with a summary or conclusion, usually consisting of a paragraph that delivers the take-home message.

Box 2. Examples of subheadings for the main text of pictorial essays:

Example 1

Title: Gastrointestinal tuberculosis

Subheadings

- Oesophagus
- Stomach and duodenum
- Jejunum
- Ileum
- Large bowel
- Extra-enteric involvement

Example 2

Title: Breast calcifications: which are malignant?

Subheadings

- Typical benign calcifications
- Intermediate-concern calcifications
- High probability of malignancy
- Pseudocalcifications

Example 3

Title: Radiographical approach to jaw lesions

Subheadings

- Cysts of the jaw
- Odontogenic tumours
- Tumours and other lesions related to bone
- Inflammatory lesions
- Systemic diseases manifested in the jaws

In Example 1, where the pictorial essay reviews endoscopic and radiological findings of non-human immunodeficiency virus-associated gastrointestinal tuberculosis, the topic subheadings are divided into anatomical regions that are affected by tuberculosis. In the pictorial essay on the mammographical appearances of breast calcifications (Example 2), the topic subheadings describe the three categories of calcifications according to the ACR BI-RADS classification, as well as calcification mimics (or pseudocalcifications). The pictorial essay in Example 3 aims to differentiate among common jaw lesions by describing characteristic radiographical features; hence, the subheadings are based on various lesion aetiologies.

The number of references is limited to a few key articles, typically 8–15, or fewer. Unlike other categories of papers, such as original articles, case reports and review articles, pictorial essays allow for a larger number of figures. A typical pictorial essay may contain up to 20 figures or 30 figure parts, with the maximum allowable number or range, depending on the requirement of individual journals. Tables are optional, and may be useful in complementing information in the main body of the text, but whether they are allowed depends on individual journal policy. As the text is usually short, much of the message resides in the figure legends. Figure legends are therefore a key feature of pictorial essays and require meticulous preparatory efforts.

As a pictorial essay depends heavily on the visual portrayal of a particular topic, authors need to pay special attention to the selection of illustrations, with emphasis on their educational value and quality. Types of illustrations found in pictorial essays include radiological images (e.g. radiograph, computed tomography, magnetic resonance imaging), photographs (e.g. clinical, intraoperative, specimen, endoscopic, laparoscopic, enteroscopic), histological photomicrographs, electron micrographs,

physiological signal tracings (e.g. electrocardiogram, electroencephalogram, echocardiogram), laboratory graph (e.g. chromatogram, karyogram) and line drawings (e.g. schematic diagram). Guidelines on preparing various forms of illustrations can be found in the Singapore Medical Journal's Effective Medical Writing series article entitled "Preparing effective illustrations. Part 2: photographs, images and diagrams."⁽³⁾

Box 3. Common problems with pictorial essays:

- Excessively long manuscript.
- Too much text.
- Poor organisation of contents/poor sequence of subheadings.
- Too many references.
- No teaching value or clear take-home message.
- Poor-quality illustrations.
- Similar (or repeated) illustrations.

SUMMARY

A pictorial essay is a type of teaching article that aims to provide an up-to-date visual portrayal of a specific topic. This type of article allows for a large number of illustrations which should have educational value and be of high quality.

Box 4. Take-home points:

1. A pictorial essay should be up-to-date and educational.
2. The teaching message is based on a large number of high-quality images supplemented by legends.
3. The text and reference list are short.

REFERENCES

1. Peh WCG, Ng KH. Basic structure and types of scientific papers. Singapore Med J 2008; 49:522-5.
2. Peh WCG, Ng KH. Title and title page. Singapore Med J 2008; 49:607-9.
3. Ng KH, Peh WCG. Preparing effective illustrations. Part 2: photographs, images and diagrams. Singapore Med J 2009; 50:330-5.

SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME
Multiple Choice Questions (Code SMJ 201003A)

- | | True | False |
|--|--------------------------|--------------------------|
| Question 1. A pictorial essay aims at: | | |
| (a) A visual portrayal of a topical issue. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) A report of a single interesting case. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) A description of a new surgical technique. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) A critical review of a newly-published textbook. | <input type="checkbox"/> | <input type="checkbox"/> |
|
 | | |
| Question 2. The structure of a pictorial essay includes: | | |
| (a) A short introduction. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) A detailed materials and methods section. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) An unstructured abstract. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) At least 50 references. | <input type="checkbox"/> | <input type="checkbox"/> |
|
 | | |
| Question 3. The following statements about a pictorial essay are true: | | |
| (a) They may be found in radiology journals. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) They are never found in non-radiology journals. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) The teaching message is conveyed through images and the accompanying legends. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) The manuscript should be constructed exactly according to the journal's Instructions to Authors. | <input type="checkbox"/> | <input type="checkbox"/> |
|
 | | |
| Question 4. The following are common problems with a pictorial essay: | | |
| (a) Excessively long text. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Too many references. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Large number of illustrations. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Repeated illustrations. | <input type="checkbox"/> | <input type="checkbox"/> |
|
 | | |
| Question 5. The main criteria for publication of a pictorial essay include: | | |
| (a) High-quality illustrations. | <input type="checkbox"/> | <input type="checkbox"/> |
| (b) Educational value. | <input type="checkbox"/> | <input type="checkbox"/> |
| (c) Originality. | <input type="checkbox"/> | <input type="checkbox"/> |
| (d) Clear take-home message. | <input type="checkbox"/> | <input type="checkbox"/> |

Doctor's particulars:

Name in full: _____

MCR number: _____ Specialty: _____

Email address: _____

SUBMISSION INSTRUCTIONS:

(1) Log on at the SMJ website: <http://www.sma.org.sg/cme/smj> and select the appropriate set of questions. (2) Select your answers and provide your name, email address and MCR number. Click on "Submit answers" to submit.

RESULTS:

(1) Answers will be published in the SMJ May 2010 issue. (2) The MCR numbers of successful candidates will be posted online at www.sma.org.sg/cme/smj by 7 June 2010. (3) All online submissions will receive an automatic email acknowledgment. (4) Passing mark is 60%. No mark will be deducted for incorrect answers. (5) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council.

Deadline for submission: (March 2010 SMJ 3B CME programme): 12 noon, 31 May 2010.