

**Publication Ethics:
Common Misconduct Issues and
How to Avoid Them**

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Learning Objectives

- Identify guidelines and ethical considerations for biomedical publications
- Apply guidelines appropriately for current and future scientific publications
- Explain ethical issues to colleagues and co-investigators

Background Data

- 38% of *AJR* articles have seven or more authors: *AJR* 2009; 193:599-600.
- Of 324 biomedical journals 41% have no specific guidelines (i.e., ICMJE): Wager E. Medscape July, 2007.
- Only 6% of basic science researchers understand the rules for scientific publication: Garcia AM. *J Epidemiol Com Health* 2004; 58:731-733.

Background Data

- There are over 200,000 duplicate publications in the Medline data base: Errami M, Garner H. *Nature* 2008; 451:397-399.
- CrossCheck data detected duplication in 22.8% of journal articles. The extent of duplication detected was up to 83%. Zhang H. *Learned Publishing* 2010; 23:9-14.

CrossCheck

- AJR began using CrossCheck on every submission beginning May 1, 2012.
- All submissions with $\geq 10\%$ duplication are re-evaluated by the editors.
- Duplication $\geq 10\%$ occurs 5-10 times per week.
- In some cases the authors are given a chance to modify the manuscript and resubmit.
- Duplications $\geq 20\%$, especially if not technique, may be rejected without review.

CrossCheck

- Currently, CrossCheck is used primarily as an educational tool.
- Most duplication is in technique or material and methods. In this setting, if not $\geq 10\%$, the manuscript may be evaluated and sent on to peer review.
- Duplications in other sections of the manuscript are looked at more critically.

Resources for Publication Ethics

- **International Committee of Medical Journal Editors (ICMJE) (www.icmje.org)**
- **Committee on Publication Ethics (COPE) (www.publicationethics.org)**
- **World Association of Medical Journal Editors (WAME) (www.wame.org)**

What do we need to know about publications ethics?

- Thoroughly review and understand the ethics of publication in a biomedical journals (ICMJE, www.icmje.org)
- Standards apply to authors, reviewers, and editors
- Many biomedical (*AJR*) journals also provide author guidelines for each article category.

Author Guidelines

- **General guidelines for all manuscripts: Cover letter, structural format (Abstract, Introduction, Materials and Methods, Reference formats, etc.)**
- **Criteria for specific article types**
 - Article type description
 - Pages (words)
 - Number of references
 - Number of figures
 - Number of tables

The Cover Letter is Critical

- The cover letter must include a full statement regarding all previous publications or presentations that might be considered duplicative.
- Any prior similar work should be submitted with the manuscript and cover letter for the editor's evaluation.
- Any prior similar work should be specifically referred to and referenced in the manuscript.

The Cover Letter is Critical

- Any published abstracts from meeting presentations must be noted, and if similar, permission must be obtained from the society.
- Permissions from prior work should be submitted with the cover letter.
- Disclosures for each author, individually, must be stated. If there are no disclosures, this should be specifically stated.

Copyright Transfer Agreement

- All authors must understand and sign this agreement with each manuscript submission.
- The copyright transfer agreement reinforces the standards set forth by the ICMJE.
- By signing the agreement the corresponding author and all co-authors pledge they have read the agreement and meet the criteria listed in the agreement.

Berquist TH. The copyright transfer agreement: We sign it, but do we understand it? *AJR* 2009; 192:849-851.

Copyright Transfer Agreement

Protection for authors and journals

- Protecting the rights of others: plagiarism, duplication of others or authors prior work, IRB review
- Disclosure of potential conflicts of interest: defined in ICMJE guidelines section II.D- www.icmje.org; **guidelines also apply to editors and reviewers**
- Certifies that scientific content of images has not been altered.

Copyright Transfer Agreement Protection for authors and journals

- Authors must have made substantive and significant contributions. “An author should be able to claim public responsibility for a specific section of the manuscript” (ICMJE section II.A-www.icmje.org)
- The content of the manuscript is HIPPA compliant.

Copyright Transfer Agreement

Protection for authors and journals

- The authors certify that the manuscript has not been previously published and is not under consideration for publication elsewhere.
- The agreement must be signed by all authors contributing to the manuscript.
- The copyright on the content then belongs to the journal of record. **It is no longer yours to use as you wish!**

Authorship

Do I meet the criteria?

- Research design
- Data acquisition
- Analysis and interpretation of data
- Provided draft of manuscript
- Performed critical revision of content
- Performed statistical analysis

Berquist, TH. *AJR* 2009; 193:599-600

Examples of Publishing Misconduct

- Plagiarism and self-plagiarism
- Falsification of data
- Manipulation of images/falsification with intent to deceive
- Falsification of figure legend demographics
- Reuse of images without attribution and permission
- Duplicate publication or simultaneous submissions to multiple journals

Examples of Publishing Misconduct

- Redundant publication (submission of material that is essentially the same as material previously published)
- Misuse/reuse/redistribution by reviewers of material sent for peer review
- False attestation regarding HIPPA compliance
- Failure of editors to preserve the scientific integrity of the journal

Authorship Misconduct

- If you sign the copyright transfer agreement you become part of any potential misconduct investigation.
- Therefore, if you are really a “guest” author you will be included in any potential misconduct investigation and will be subject to the same disciplinary measures.

Misconduct Investigations Follow a Strict Protocol

- Authors, reviewers and editors are given the opportunity to respond to allegations. Their response may close the case.
- If the response is not satisfactory a full, confidential investigation is initiated with independent reviewers.
- The process can take weeks to months to complete.
- The authors, reviewers or editors are notified in writing regarding the results of the investigation.

Potential Results of Misconduct

- Minor misconduct may result in reminding the authors of the issue and placing them on a watch list.
- Major misconduct results in sanctions which may include a publication ban for up to 5 years and loss of positions with a society or journal for the same time period.
- Final misconduct decisions apply only to *AJR* unless another journal is also involved.

How do we avoid misconduct investigations?

- Clearly understand the journal's guidelines for authorship before you submit.
- Review the International Committee for Medical Journal Editors (www.icmje.org) guidelines.
- Avoid being a “guest author” on papers if you did not provide a significant contribution.

How do we avoid a misconduct investigations?

- Reviewers must keep manuscripts confidential and avoid sharing content with colleagues or using material for their own purpose.
- Editors must maintain the scientific integrity of the journal and avoid any decisions that may be potentially considered a conflict of interest.

**Common Examples
and
How to Avoid Misconduct**

Plagiarism and Self-Plagiarism

- **Plagiarism:** presenting the work of others (text, tables, figures, etc.) as if it were your own
- **Self-plagiarism:** partial or complete reuse of previously presented or published material as though original without proper referencing and permission from the original source

Plagiarism Examples

- The authors use large or small portions of text from another work without referencing and using quotes.
- Figures are modified without permission from the original authors and journal.
- A reviewer uses someone's submission and submits it to another journal or society as their own work.

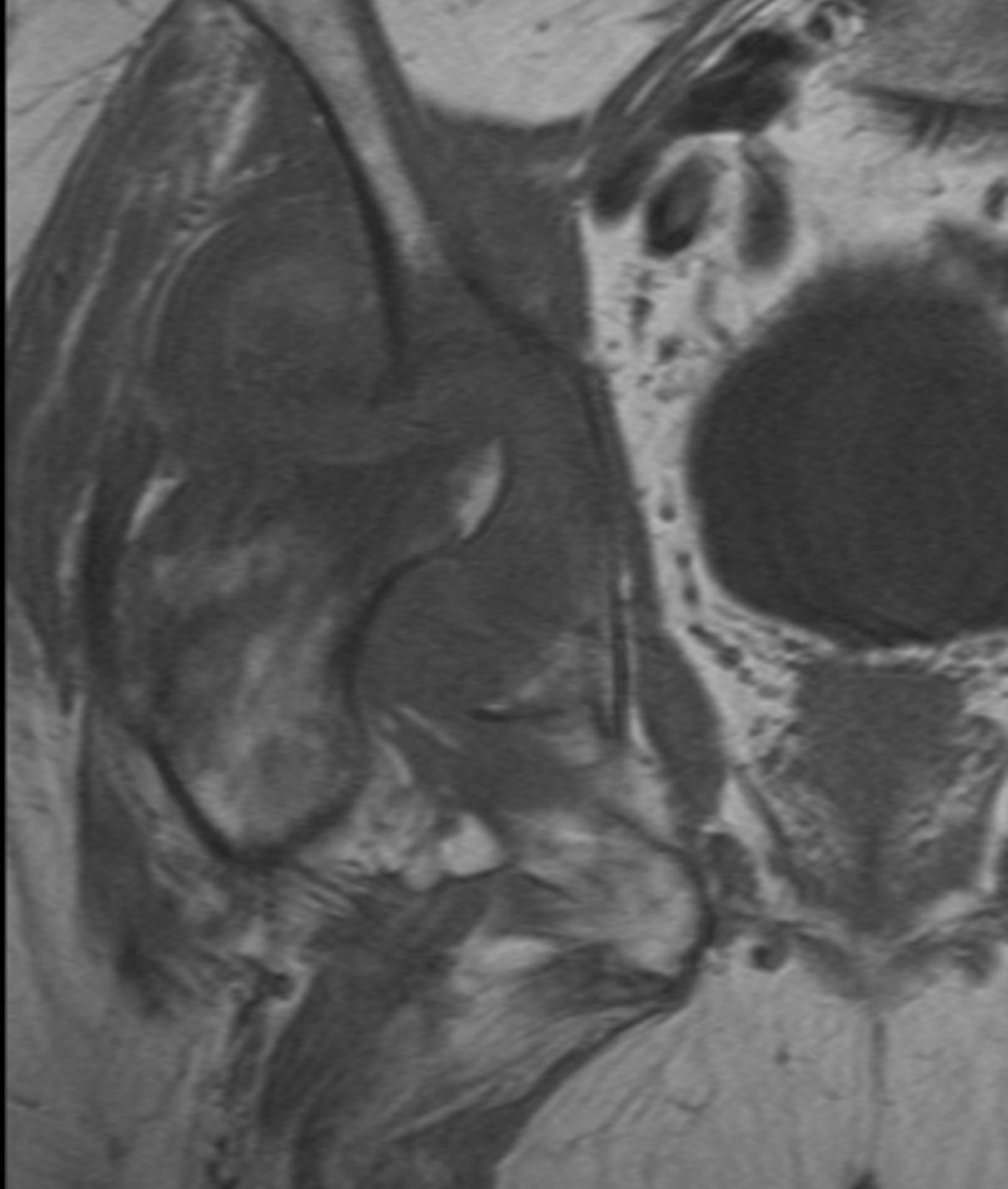
How to Avoid Potential Plagiarism

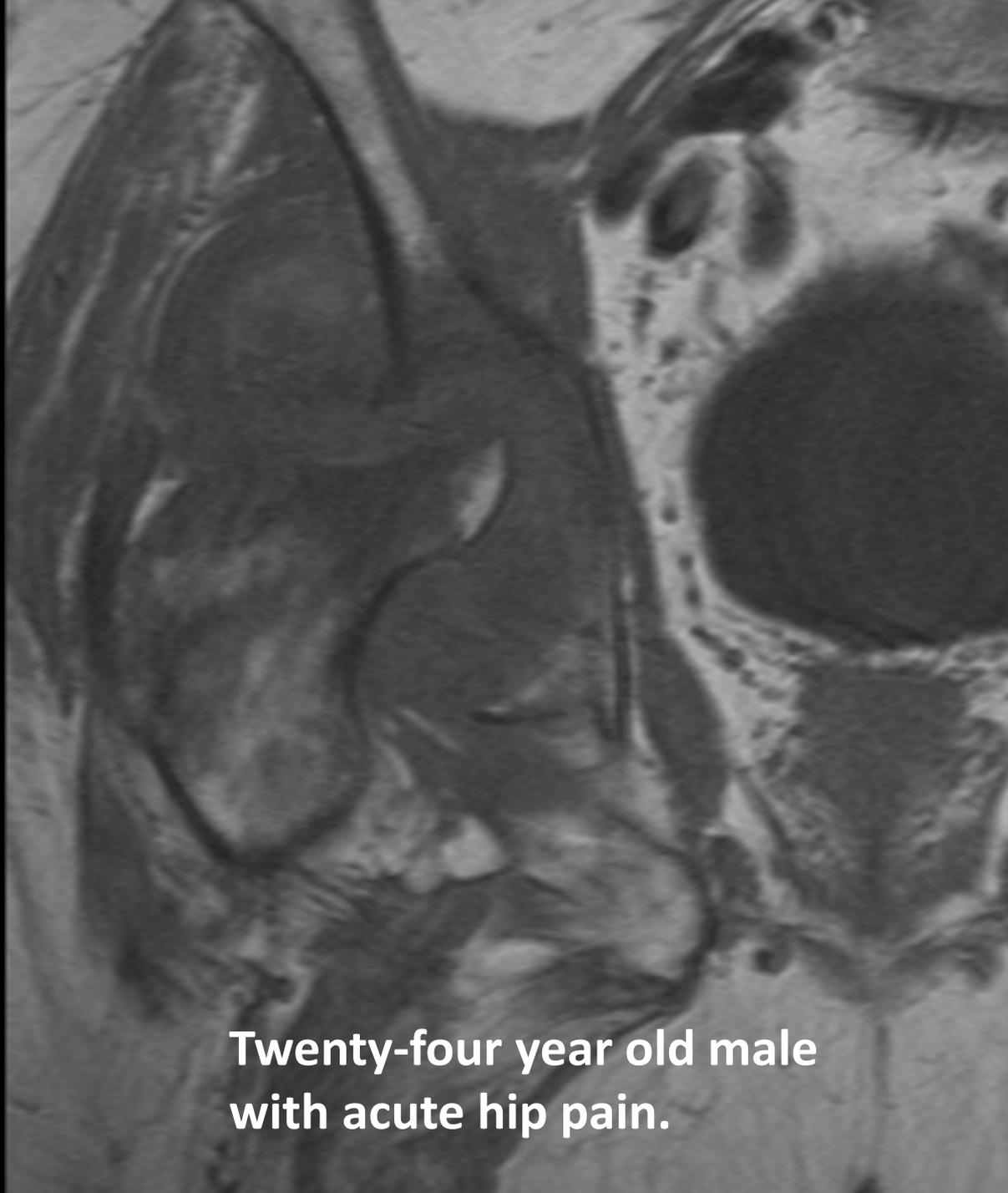
- If you use a sentence or two place the content in quotes, use the authors name and appropriately reference: Johnson, et al (ref) noted or stated “.....”
- For more substantial text or images and tables you must obtain permission from the journal and authors. Still use quotes and give the reference and figure information from the prior journal.

Self-plagiarism Examples

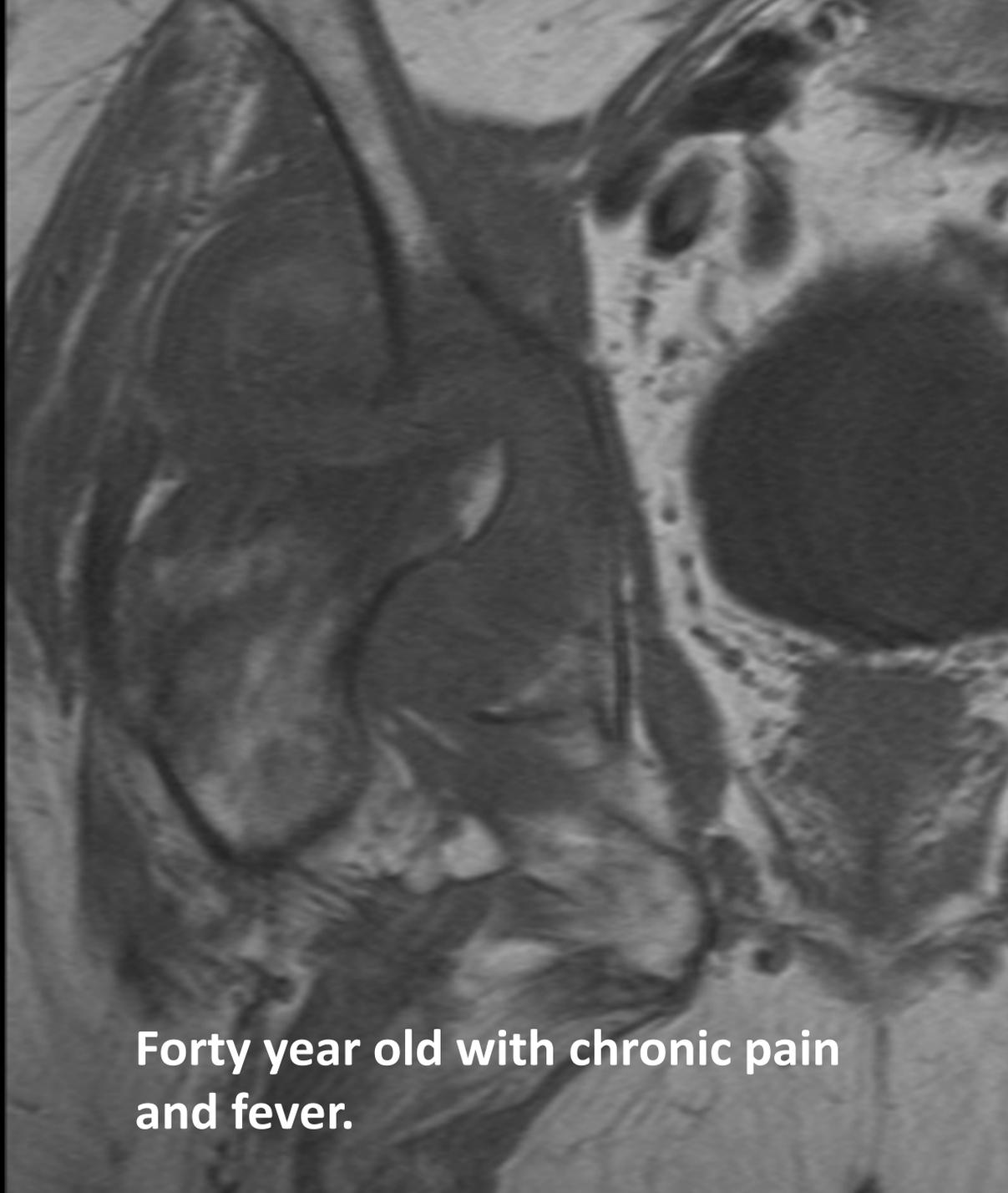
- Reuse of the same materials and methods.
- Reuse of data from prior work without referencing.
- Reuse of images with no or minor modification such as moving arrows or changing patient demographics.
- Author's argue that "it's my work so it doesn't matter".
- The copyright transfer agreement puts you in violation of copyright rules.

Image Modifications

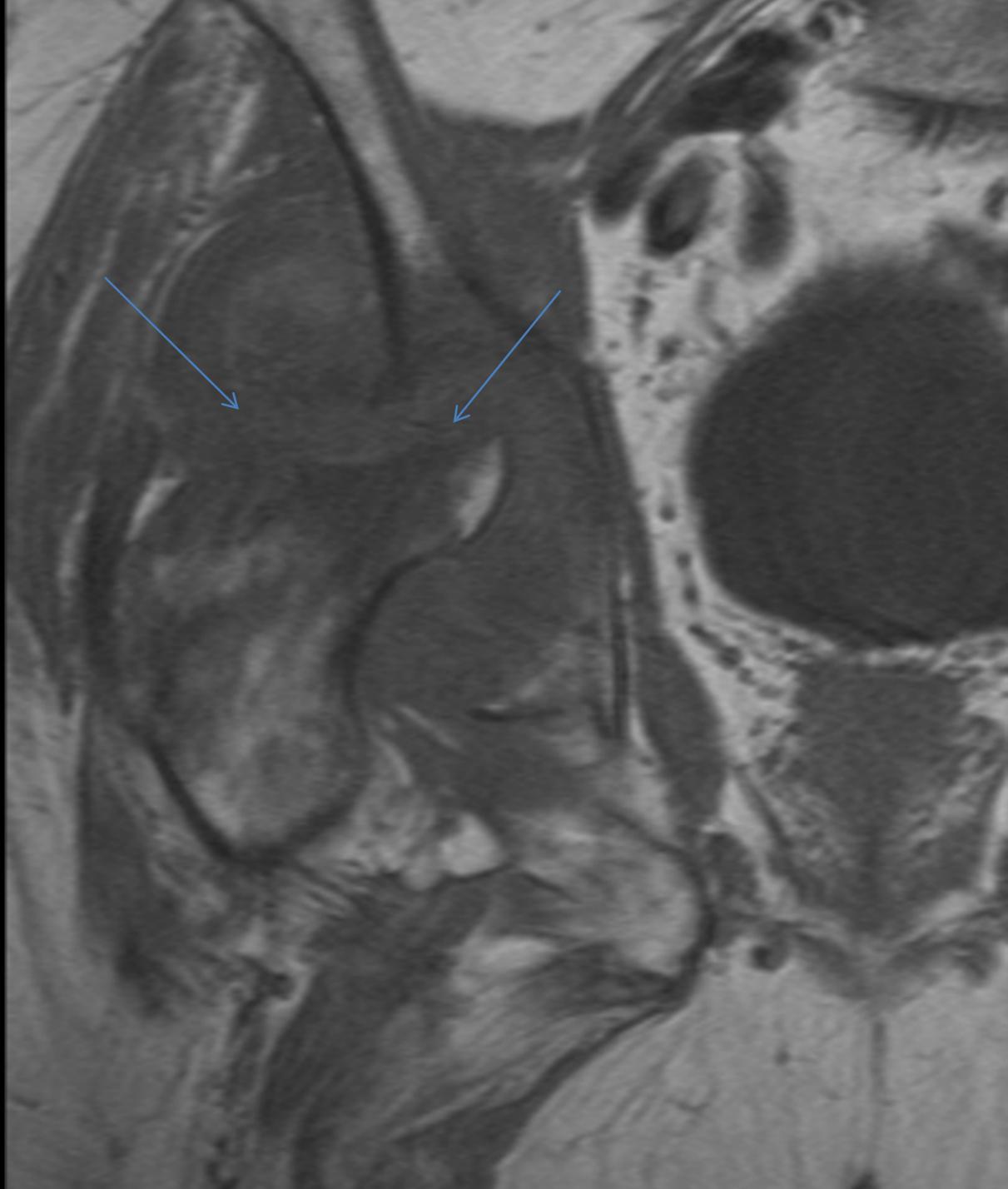




**Twenty-four year old male
with acute hip pain.**



**Forty year old with chronic pain
and fever.**



Can we reuse an image from our prior work?

- Alert the editor that you have published similar content previously in the cover letter to the journal and include references in the letter and submission.
- Obtain permission from the journal and reference the reused material appropriately.

Can we use a different slice from the same case used in a prior presentation or publication?

- There is complete lack of consistency as to whether this is acceptable.
- Some journals require authors to submit the entire case along with the selected digital image.
- AJR author guidelines state that using a different slice from a previously published case will be considered an adaptation and require permission from the authors and journal.

ICMJE Guidelines

- “When submitting a paper, the author must always make a complete statement to the editor about all submissions and previous reports (including meeting presentations and posting of results in registries) that might be regarded as redundant or duplicate publications. “ icmje.org

ICMJE Guidelines

- “The author must alert the editor if the manuscript includes subjects about which the authors have published a previous report or have submitted a related report to another publication. Any such report must be referred to and referenced in the new paper.”
- “Copies of such material should be included with the submitted manuscript to help the editor decide how to handle the matter.”
(www.icmje.org)

**Is a second or overlapping
publication allowed?**

ICMJE Guidelines

- **Simultaneous submission to two journals is prohibited in most cases.**
- **Redundant or duplicate publication occurs when the submitted paper overlaps a prior publication.**
- **Authors must always make a statement to the editor regarding prior similar work.**
- **Failure to follow these guidelines results in immediate rejection and a potential misconduct investigation.**

Options

- Alert the editor that the manuscript contains prior work and reference appropriately (i.e. , an expanded study).
- The manuscript is intended for a different audience and prior work appropriately referenced including a footnote on the title page.
- The editors of two journals may allow simultaneous publication if deemed in the best interest of “public health” (www.icmje.org).

I presented a paper at a meeting and now what to publish it?

Common problems to consider

- Has the presentation occurred or will it occur in the future? The journal publication date and presentation date may be a problem.**
- If the presentation has occurred prior to manuscript submission to a journal does the society own the copyright on the abstract? If so this must be included in the cover letter and permission provided with the letter.**

I presented a paper at a meeting and now what to publish it?

- **Even if the abstract was not published, a copy of the abstract should be included with the cover letter when submitting the manuscript.**
- **Does the society have first rights for publication of meeting presentations? If so, conflicts will occur. For example, once published the society may request retraction of the article or if noted prior to publication the effort of peer review and technical checks will be time wasted.**

Common Issues

I didn't mean to do it??

- Same patient population with duplicative introduction, material and methods and evaluate a slightly different condition. The prior work is not noted in the cover letter and not referenced in the manuscript.
- The same paper is simultaneously submitted to a radiology journal and clinical journal without checking with both journals ahead of time. There are occasions when this would be allowed, if handled properly.

Common Issues

I didn't mean to do it??

- A statistician is included in a misconduct investigation even though he/she only contributed to reviewing the statistics. In the future this person agreed to be simply acknowledged.
- A reviewer feels he/she knows the authors, but reviews and rejects the manuscript. If there is a perceived conflict of interest the reviewer should not review the manuscript and notify the editor-in-chief.

Common Issues

I didn't mean to do it??

- What if a reviewer rejects a manuscript without thorough evaluation and appropriate comments to the authors? There is no data to defend against an author's appeal of the decision. In this case, an appeal is granted and additional reviewers are appointed. This delays the final decision and publication date.

The Impact of Open Access Journals

- There are over 100 print/online radiology journals.
- Open access journals number in the hundreds.
- Financial models may include advertising placed by external vendors and various author pay models.
- **Some open access journals allow authors to retain the copyright.**

Author Pay Model

- **Author Pay examples**
 - Charges per page: \$80/page for first 8 pages and \$160/page for each additional page (10 page article=\$970)
 - Color: \$150-1000 for each figure
 - Tables and Figures similar to page charges

Hybrid Author Pay Models

- **Some traditional subscription journals are beginning to charge authors.**
 - **Color**
 - **Exceeding page limits for article category**
 - **Exceeding figure and table limits”**
 - **Other special features**

Open Access Author Pay Example

- **DovePress: 132 author pay journals**
 - Author pays once peer reviewed and accepted
 - Payment designed to cover all costs
 - Papers appear electronically on website and free to public
 - Variation in foreign exchange result in fee variations without notice to authors
 - Articles cannot be used for commercial purposes
 - Fees may be reduced for authors from underdeveloped countries

Open Access Journals

Revenue Sources

- **Advertising**
 - Conventional approach: requires marketing staff
 - Online services: no staff required, but no control over page placement
- **Branded products for sale**
 - Internal control
 - Vendor control

Advertising Concerns

- Vendors have variable approaches.
- In some cases the journal does not control where advertising is placed.
- This can result in ethical issues and potential conflicts of interest.

Publication Ethics

- “advertising must not be allowed to influence editorial decisions. Journals should have formal, explicit, written policies for advertising in both print and electronic versions. Editors must have full and final authority for approving advertisements and enforcing advertising policy.” www.icmje.org

Publication Ethics

Create Good Habits

- **Review the ICMJE criteria and author guidelines for the journal selected.**
- **If you have questions, contact the journal editor or staff for clarification prior to submission.**
- **Submit references (PDF of articles) of prior related work with the cover letter to the journal.**

Publication Ethics

Create Good Habits

- **Obtain permission for any material that might be considered duplicative and provide proper attribution.**
- **Declare any potential conflicts of interest for any or all authors.**
- **Document IRB approval as appropriate.**
- **Mentor your colleagues and co-investigators regarding publication ethics.**