**Overview**

There will be two faculty members assigned to each journal club session. Each faculty member will select a journal article, which means that there will be two articles for each session. Faculty members will also be responsible for completing the CME paperwork, which will be provided to them several days prior to the conference, in a *timely manner*.

Articles can be selected from any medical journal as long as they are relevant to the field of anesthesiology and its subspecialties. Investigational (clinical) research articles are preferred but review articles can be used as long as only one review article will be presented in any one session. Assigned faculty should send the article electronically well in advance (2 weeks) of the session to Susan Dawkins. Attendees should complete the evaluation on One45; CME/CE credits will be provided to all the attendees.

Residents assigned for Journal Club will make a brief presentation of the articles during the conference. Faculty will then lead the discussion of the article they had selected. Residents need to learn how to critique and present the journal articles (suggestions are attached). The faculty member is expected to guide his/her assigned resident in analyzing the article and planning how it will be presented.

A resident will be selected as “**Best Presenter**” by journal club attendees and presented with an award at the graduation banquet. To be eligible for this annual award the resident must have attended 65% of all educational activities.

Residents should get in touch with the faculty who selected the article for guidance. Any resident who is unable to complete his/her assigned article (because of a scheduled vacation, interview, etc.) should find a replacement or switch dates with someone and inform either the chief resident or journal club director as soon as possible.

**Every faculty member who is not involved with clinical duties during the conference is expected to attend this once-a-month educational event to contribute to resident education and provide an exchange of views.** Journal club and grand rounds count toward the 65% attendance rate that is expected of all faculty members. Everyone’s efforts are valuable and very much appreciated.
**Suggested Checklist for Critical Appraisal of Scientific Articles**

Critical appraisal skills are believed to play a key role in evidence-based medicine practice. Learning critical appraisal skills will significantly improve one’s knowledge and efficiency, as well as increase the use of the literature in clinical decision making.

**Goals and Objectives:**

- To learn evidence-based medicine practice.
- To develop life-long learning skills
- To develop skills to critically appraise scientific articles
- To develop scientific journal presentation skills
- To improve knowledge and thereby improve clinical practice
- To stimulate the generation of ideas for future research

**Guidelines for Presenting at Journal Club**

**Purpose:**

- What was the authors’ purpose in writing the article or doing the research?
- What are the scientific hypotheses that the authors attempting to address?
- Was the study reviewed and approved by an institutional review board?
- Was the study really needed in this field?
- Was the background information adequate to understand the objectives of the study?

**Authors:**

- Who is the lead author and what are his/her academic credentials?
- Which organization or institution is the author affiliated with?
- Is he/she an expert in this research subject?

**Sponsorship or Funding Source:**

- Who sponsored the study?
- Is there any possibility of bias or unfounded assumptions?
- Are there any financial conflicts of interest and were they disclosed?

**Type of Journal:**

- Is the article from a scholarly or a “throw-away” journal? In other words, was the article peer-reviewed or was it simply edited for publication?
- What is the overall quality of the periodical journal in which article was published?\(^1\)
- Quality of peer review process
- Citation rate/impact factor
Journal Club Goals, Objectives and Expectations

- Circulation rates
- Manuscript acceptance rate
- Indexing on Medline, CINAHL, etc.

High citation rates, impact factors, and circulation rates, and low manuscript acceptance rates and indexing on Brandon/Hill Library List appear to be predictive of higher methodological quality scores for journal articles.¹

Methodology

Study Design: What is the research design (cohort, case control, meta-analysis, pilot study, cross-sectional, case series, etc.)?

Subjects

- Is the target population clearly defined?
- Did investigators obtain informed consent from participating patients?
- Were subjects randomly assigned to groups? Were subjects and/or investigators blinded to study treatment?
- What were the criteria used to select subjects (inclusion/exclusion criteria)?
- Is there an adequate number of subjects to provide power for this study?
  - Was there a control group? Were the study group and control group characteristics appropriately matched?

Methods

- Was the study method clear, with a chronological description of what was done and how it was done?
- Were the methods described in sufficient detail for others to repeat or extend the study?
- Were the design and methods used by the authors sufficient to address the study hypothesis?
- Have the authors indicated why a particular method was used, any potential problems with the methods used, and any limitations of these methods?
- Does the study method make sense? Would you have used the same approach?
- Were the study group and the control group exposed/treated equally (random allocation)?
- Were the patients/researcher/data collector blinded to the group assignments?
- How long was subject follow-up long and was it long enough and satisfactory?
- What are the strengths and weaknesses of the chosen study design?
Data collection

- How were data collected and analyzed?
- Were the outcome data measured and analyzed similarly in both groups?
- What is the quality of the interpretation of the data?
- Did the authors specified the statistical methods used for the study? (such as t-test, chi-square, ANOVA, Multiple regression, hypothesis testing, linear regression, Wilcoxon, Fisher’s exact)?
- Were the statistical methods used to analyze the data appropriate?

Results

- What did the results show?
- Are the results of the study convincing? Researchers can sometimes draw the wrong conclusions from the data. Do results really support the hypothesis?
- Is there possible reproducibility of the study result in your practice?
- Are the results applicable to your patient population or clinical practice?
- Will this study cause you to modify the way you clinically manage your patients?

Discussion

- Were the objectives of the study met?
- What are the potential explanations for the results? Discuss other studies on this topic showing similar/different conclusions. How do you account for those differences?
- Do authors indulge in needless speculation?
- Do we require another study to clarify some of the unsolved issues?
- What other studies are required to address the original hypothesis?
- Do authors discuss the limitations of their study compared to the other studies?

References

- Do authors cite appropriate papers to back up statements made in the article?
- Do authors cite their own publications inappropriately?
- Are the references recent so that analysis is up to date?

References: