

How I Do It Kim W Ah-See is stepping back from his role at the magazine, having first joined as a journal reviewer in 1997. We revisit his first article as *How I Do It* section editor from 2007.

Journal Clubs – The Happy Hour!

BY KW AH-SEE

It is with immense pleasure that I return to active service with *ENT News* as Section Editor for ‘*How I Do It*’. With my own interest in evidence-based medicine in ENT, I have decided to kick off my tenure with a ‘*How I Do It*’ article on Journal Clubs. We are all involved in them and it amazes me how differently these meetings are run from department to department. There is no perfect recipe, but I’d like to share with you what I try to do with my trainees.

I believe they can be a powerful source of education in our units, not just for our trainees but for consultants too. Try to be systematic – or at least relevant – in your planning for these meetings. Analyse your daily practice and use this as the guide for topics for your Journal Club.

In the future I will be actively seeking articles for this section from our ENT community and beyond.

In ‘the old days’ journal clubs consisted of a chat about an article you’d recently read in a journal you’d recently seen. How things have changed.

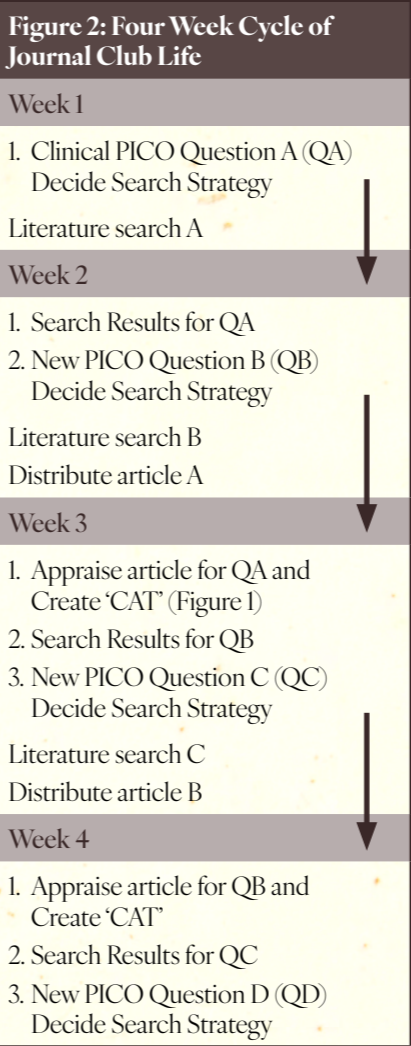
With the progression towards a more evidence-based practice for medicine, a more critical approach is required to accurately evaluate literature that is relevant to daily practice. So it is with the journal club meetings in our own department.

| Figure 1 |
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| Critically Appraised Topic (CAT) |
| Title (the clinical question) Article citation |
| Description of the methodology |
| Data provided and distilled into table format Summary of findings |
| Bottom line (the answer!) |

Two basic tenets underpin the journal club: Firstly, we aim to produce a summary called a ‘CAT’ (Critically Appraised Topic). This is a single-page resume of an appraised article. Secondly, the article should have been identified in response to a question created from a clinical scenario dealt with in the recent past, say within the last two weeks.

- The journal club should aim to last no more than one hour, and is divided into four sections:
- 1. 5 minutes: Create a PICO question**
- This should be based on experience from the ward, clinic or operating theatre in the previous week (or two). Constructing the question is important if we are to have any chance of identifying relevant literature. We can call this problem ‘C’ for reasons that will hopefully become clear below (see ‘Week 3’ in Figure 2), and the question should be structured according to the ‘PICO’ principle:
- P Patient characteristics in the scenario:
e.g. a 75 year old woman admitted as an emergency with epistaxis who is on warfarin for uncontrolled atrial fibrillation.
- I Intervention or treatment option under investigation:
e.g. discontinuation of warfarin.
- C A comparison or alternative treatment option:
e.g. continuing with warfarin.
- O Outcome measure:
e.g. duration of admission or other morbidities.

- Hence the question would look something like:
- In an elderly patient on warfarin admitted with epistaxis, is the length of hospital stay affected by discontinuing the warfarin?
- 2. 5 minutes: Discuss the search strategy**
- Namely, what terms to use in the literature search, which databases to search, and what type of articles to identify. The aim would be to identify literature of an apparently high level of evidence, e.g. a clinical randomised controlled trial. Failing that, lower levels of evidence will be sought (see Table 1). Finally identify who is going to be responsible for the search; usually this involves junior trainees despatched in pairs!
- 3. 5 minutes: Review search results**
- At this stage (assuming this is not the first journal club), we spend time reviewing the results of a search that has been performed as a result of the previously held journal club. We can call this problem ‘B’, which was discussed one meeting ago. Still following?
- The two trainees will bring to the meeting what they feel are the five or six most relevant articles worth considering.



We then decide which is the best of the proposed articles. This can be based on criteria such as study design, methodology, strength of the study, journal type and of course relevance to our PICO question. The chosen article(s) is / are then distributed for analysis by all involved in preparation for the next journal club.

4. 45 minutes: Critical appraisal of article

Now we turn our attention to the main ‘body’ of the meeting, which is a critical appraisal of the previously circulated article(s) as a result of the clinical question, called problem ‘A’, which was initiated two meetings ago. Get it?!

This is the most important part of the whole process in order to, hopefully, answer our initial clinical question. How you appraise the literature is in some ways a personal decision. However, there now exist very clear guidelines as to how one should actually perform this task. Aspects to appraise include: methodology; calculating (or even

| Table 1. | |
|--------------------------|--|
| Levels of evidence | |
| 1++ | High quality meta analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias |
| 1+ | Well conducted meta analyses, systematic reviews of RCTs, or RCTs with a low risk of bias |
| 1- | Meta analyses, systematic reviews of RCTs, or RCTs with a high risk of bias |
| 2++ | High quality systematic reviews of case-control or cohort studies High quality case-control or cohort studies with a very low risk of confounding, bias, or chance and a high probability that the relationship is causal |
| 2+ | Well conducted case control or cohort studies with a low risk of confounding, bias, or chance and a moderate probability that the relationship is causal |
| 2- | Case control or cohort studies with a high risk of confounding, bias, or chance and a significant risk that the relationship is not causal |
| 3 | Non-analytic studies, e.g. case reports, case series |
| 4 | Expert opinion |
| Grades of recommendation | |
| A | At least one meta analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population; or a systematic review of RCTs or a body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results |
| B | A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 1++ or 1+ |
| C | A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or extrapolated evidence from studies rated as 2++ |
| D | Evidence level 3 or 4; or extrapolated evidence from studies rated as 2+ |

recalculating) the data supplied; and what to conclude from the paper (not necessarily what the authors themselves might have concluded!); and identifying ‘fatal flaws’ such as biased patient selection, poor randomisation, lack of power, lack of adequate blinding and large drop-out rate. Any of these aspects may mean that one cannot rely on the study’s conclusions.

A four-week cycle of how this type of journal club works is shown in Figure 2.

I highly recommend Trisha Greenhalgh’s book *How to Read a Paper* for a very readable, easy to follow text [1]. A number of useful websites are also available below:
www.library.nhs.uk
www.cochrane.org
<https://pubmed.ncbi.nlm.nih.gov>
www.cebm.net

At the end of the journal club it will be possible to create the final product, namely a ‘CAT’, which as described

above should consist of a single side of A4 with the salient points (Figure 1). This can then be laminated and posted on the notice board for future reference.

Now at last with the work done, it is time for a drink!

References

1. Greenhalgh T. How to read a paper: the basics of evidence-based medicine, 2006. 3rd Edition, BMJ Books: Blackwell Publishing, Oxford.

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