ABOUT CLINICOPATHOLOGICAL CONFERENCE AND ITS’ PRACTICE IN THE SCHOOL OF MEDICAL SCIENCES, USM

Shahid Hassan

Department of Otolaryngology, Head and Neck,
School of Medical Sciences, Universiti Sains Malaysia, Health Campus
16150 Kubang Kerian, Kelantan, Malaysia

The clinicopathological conference, popularly known as CPC primarily relies on case method of teaching medicine. It is a teaching tool that illustrates the logical, measured consideration of a differential diagnosis used to evaluate patients. The process involves case presentation, diagnostic data, discussion of differential diagnosis, logically narrowing the list to few selected probable diagnoses and eventually reaching a final diagnosis and its brief discussion. The idea was first practiced in Boston, back in 1900 by a Harvard internist, Dr. Richard C. Cabot who practiced this as an informal discussion session in his private office. Dr. Cabot incepted this from a resident, who in turn had received the idea from a roommate, primarily a law student.

Key words: Clinicopathological conference, medical education, medical school, University Sains Malaysia.

Introduction

With the advent of information technology and changing philosophy of medical education via the current cognitive psychology theory, Clinicopathological conference (CPC) seems to have lost it’s popularity it once commanded. Nevertheless, a well-presented CPC remains a dynamic tool of teaching that not only offers clinicopathological co-relation but also serve to build clinicopathological competence.

Enthusiasts, in the medical practice particularly those engaged in teaching setups, never stop learning and for them a carefully prepared CPC provides a platform for intellectual interaction with an updated information (1).

The original CPC format

In the original CPC format an unknown case is presented by a speaker called the “presenter” where discussion, inviting the audience participation comes from another presenter called the “discussant.” The presenter at the final session of CPC discusses how the diagnosis is confirmed and also provides details regarding the case outcome. Critical to this educational formats’ is an appropriate presentation. Cases are discussed using logical consideration of their salient features and measured consideration of suggested differential diagnosis.

The pre-requisite of a good CPC includes, selecting the case, preparing and presenting the case, discussing the case and finally presenting the ultimate diagnosis followed by brief case discussion(2). Good presentation skills are required of the case presentation, which subsequently opens up room for discussion and logical consideration of differential diagnosis with gradually narrowing the list to few provisional diagnoses, finally leading to a tentative diagnosis.

Selecting the case

The type of case selected is an important determinant of the presentation’s effectiveness. The best case for CPC has the element of relevance, solvability and discuss-ability.

Discriminating information must be available to allow thoughtful, logical discussion and consideration of the differential diagnosis.

Presenting the case

Case information sent to the discussant is presented to the audience. Information that has not
been given to the discussant is not provided to the audience. The presenter does not interpret the data rather he allows the discussant to interpret those data. The first presenter will present history, physical examination, and all the relevant investigations, giving the results of those diagnostic tools. He also reveals the final diagnosis and gives details regarding the case outcome at the end.

Diagnostic studies obtained are presented in order in which it was collected. It may be appropriate to withhold a confirmatory test obtained as long as the case is solvable based upon the other information presented. This purely is the responsibility of the presenter.

**Discussing the case**

Discussion part in a formal CPC comes from a discussant other than the presenter. The contextual interpretation of data is important part of the CPC; it provides all the information obtained in history and physical examination at an appropriate level of detail. This comes from the discussant. Presenter starts the CPC with case presentation and ends the CPC with the final diagnosis and its discussion, while in between the discussant evaluates the case summarizing the salient features and relating these features to a list of differential diagnoses in his opinion.

**Presenting the final diagnosis**

One must remember the main objective of CPC, which emphasizes on measured, logical progression from a patients’ presentation to a narrowed differential diagnoses rather than focusing on a final diagnosis. CPC is all about the processes in which a case is presented that allow the discussant to guide the audience to a tentative final diagnosis. To reveal the final diagnosis is the job of the 1st presenter.

**CPC as Practiced in PPSP**

Having discussed the ideal CPC presentation called clinicopathological case (CPC) conference, we will now highlight the format that has been practiced in the School of Medical Sciences (PPSP), over the years. The original format of CPC is considered a tedious process or exercise that provides the discussant and the audience with an opportunity to consider clinical co-relation aiming to improve clinical competence and learning that is meaningful and collaborative.

In School of Medical Sciences there are 3 CPC presentations during the first 3 weeks while the 4th week is reserved for the research presentation, every Thursday of the week.

**Types and allocation of CPC slots**

We have been practicing a modified version of CPC in the School of Medical Sciences in USM since many years. This was essential to make it practical, feasible and reproducible once a week, round the year. In PPSP, a team comprising of deputy dean research, a senior lecturer-in charge of CPC and a staff from academic office, chalk out the yearly program of CPC, allocating slots to various departments and identifying chairmen to moderate the presentations. The list is then sent to respective head of departments to select the speakers for one complete calendar year in advance. A number of assessors (5-7) are also nominated to evaluate each presentation through a standard format provided. This report is utilized for the final selection of best CPC in each category at the end of each year.

A number of clinical and non-clinical departments are involved in CPC presentation. Usually one to two full CPCs and one to three case presentations are allocated to each department depending upon the available strength of their staff members. Full CPC is reserved for a specific topic to be discussed with reference to a case presented at the beginning by lecturer of a specified discipline who is responsible for selecting the case and the appropriate co-speakers from other relevant discipline who were involved in evaluation, diagnosis and treatment of this case.

**Full CPC on one complete subject**

In this format of CPC, presenter and discussant is usually the same person or persons from the same department. Discussant here has prior information of ultimate diagnosis and outcome of a case presented. A contribution from the audience is invited by the presenter to add to the list of provisional diagnoses that has been proposed by the presenter (though this is seldom practiced). Alternatively he may give the salient features about the case and invite the differential diagnosis from within the audience. Later the presenter will give the detail of course of management and factors involved in the final diagnosis.

Unless the audience are willing to contribute to an unknown case discussed in the cpc the whole process becomes monotonous. One man show of a presenter with minor involvement of co-speakers filling in the gaps is sometimes impractical.
**Case presentation CPC on different subjects**

The second format of our CPC is more or less a straightforward presentation since two departments are invited in the same CPC session to share with the audience some of their important and unusual cases or routine cases with unusual presentations. Time is equally divided amongst two departments, though the 1st speaker usually consumes the major part of the allocated time. This is a normal complaint.

In this presentation one may come up with the diagnosis right away from the 1st picture or slide shown by the presenter. Presenter therefore may begin with an introduction, case report and discussion format pattern, more of a case report-write up of a journal. However one may make it interesting by giving the salient clinical feature and some of the diagnostic evaluation before revealing the diagnosis. Due to the time constraints there is hardly an opportunity for one or maximum two presenters for this case presentation CPC.

**Guidelines for CPC presentation in PPSP**

In the format of CPC, which is practiced in the School of Medical Sciences, presenter and discussant is usually the same person or persons from the same department. This incidentally enable discussant to have prior information of ultimate diagnosis and outcome of a case presented. This cannot guarantee the presenter to hide the details of information regarding patient from the discussant that also belong to the same department and may have been involved in patients’ management.

This modified version is essential and practical to convene the forum consistently on weekly basis. The simple reason is that in School of Medical Sciences each discipline consists of not more than one unit and therefore presenter and discussant relevant to discipline, ought to be from the same department. Else we need another institution with in town, offering the same discipline that is willing to play the role of presenter or discussant while presenting CPC on an original style. Alternatively two different disciplines may be involved to practice such a CPC presentation but that certainly will question the expertise of discussant who is from another discipline and this will not be practical.

**Responsibilities of main presenter**

Presenters in this case presentation CPC are advised to restrain from lecturing the audience giving detail basic sciences and clinical information. This is important considering the background of the audience coming from various disciplines and with little interest in minor details of a subject not relevant to them. At times multiple speakers involved in one case presentations consume the time of subsequent presentation, disallowing any time for floor interaction and audience participation.

**Responsibilities of chairperson**

Ideally the chairperson nominated for each CPC is from the department other than the one presenting. This is to ensure his effective and unbiased role as moderator, time management in case of more than one presenter specially if two different departments are involved and finally facilitating a good deal of floor interaction.

At the end chairman invites the audience for a question answer session for which 15 minutes are allocated. Speakers must comply with this last component of CPC as it carries 1/3rd marks on point table assessment by designated assessors nominated on yearly basis.

These major components of assessment methods include case or topic selection, sequence of presentation including methodology and interpretation of result and floor interaction (Q/A). Question answer session takes into account the presenters’ knowledge, attitude and confidence.

**Summary**

What do we practice? Do we comply with rules of the game originally set in order to extract the real essence of an effective learning method in term of CPC? Nevertheless, the routine CPC provides an effective and regular educational media of collaborative and cooperative learning for inter-disciplinary exchange of knowledge, interactive discussion on problem solving cases and in-house grooming of presenters and subsequent medical writing for publications. This is the objective carried by most of the institutions practicing CPC that essentially provides a working platform for novices to learn from experts as an obligatory clinical skills learning on a consistent manner.

Highlighting the problems and own mistakes encountered while managing a problem case and to bring it to an open discussion needs a lot of courage that every one may not demonstrate. However this leads to sharing of experience and learning from each other. This is another achievement of a good clinical practice ultimately gained from CPC presentations. Any how, critical to CPC effectiveness is the skilled presentation and discussion with good deal of
audience participation and their thought provocation exercise that keeps on going on a regular basis.

**Correspondence:**

Assoc. Prof. Dr. Shahid Hassan MBBS (University of Karachi, Pakistan) D.L.O. (College of Phyciantion N Furgeon Pakistan) MCPS.  
Department of ORL-HNS  
School of Medical Sciences,  
Universiti Sains Malaysia, Health Campus,  
16150 Kubang Kerian, Kelantan, Malaysia  
Tel: + 609-766 4101/4095  
Fax: +609-765 3370  
Email: shahid@kb.usm.my

**References:**