How to give a Medical Lecture in English

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Lecturing

Lecturing:

Delivery t

St

Experts

Audience

Your audience makes the way how you prepare and present

Students: deliver your knowledge(teaching)

Peers: share your knowledge

Experts: show'em how good you are

Lecturing to students (Teaching)

"... teaching remains one of the few human activities that does not get demonstrably better from one generation to the next"

(Bok,1992, p16).

"……教学仍然是为数不多的，从一代到下一代并无明显改善的人类活动之一"

Preparation: questions to ask yourself before lecturing to your students

- Is the material at the right level?

- Am I trying to cover too much?

- What difficulties can I anticipate?

- Is there any space for student involvement?

- Have I got clear learning outcomes?

- What audio-visual or other aids am I going to use?

- How can I evaluate my lecture?

- Am I using the language in an easy way to understand ?(diuretics- waterpill)

- The use of abbreviation (NAC:N-Acetylcystein)
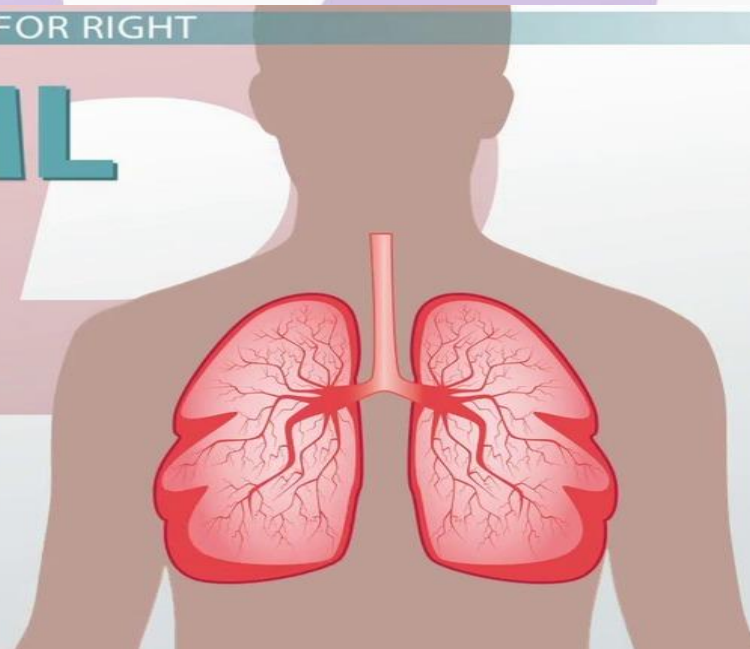
A.B.B.R (Abbreviation)

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Lab Abbreviations

| Na+ | Cl- | BUN | Glucose |
| K+ | HCO₃ | Cr | |

WBC — Hb / HCT — Plts

| 133-143 | 98-107 | 7 |
| 3.5-5.1 | 22-30 | 0.6 |

SG	1.005-1.030	Nitrates
pH	5.0-8.0	LE
Prot	0-Trace	RBC
Glu	0/Neg	WBC
KT	0/Neg	Epis
Bili	0/Neg	Bacs

7.38-7.44 / 35-45 / 80-100
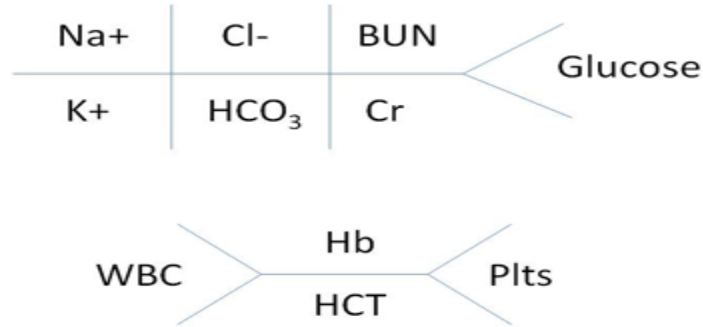
AST	0-35
ALT	0-35
AlkP	38-126
Alb	3.5-5.5
Protein	6.3-8.2
TBil	0.3-1.0

PT 11.1-13.1 | PTT 22.1-35.1

INR 0.8-1.2

Ca 8.2-10.3

Mg | Phos

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Using abbreviation, but do NOT be confusing

Criticisms of lectures and lecturers by students--things need to be avoided

- Inaudibility (听不见)
- Incoherence(不连贯)
- Level
- Not emphasising key points
- Poor presentation
- Lacking presentational skills
- Not showing sufficient enthusiasm for their subject,
- Not encouraging active participation by students and
- Not providing quick and detailed **feedback** to students

Brown and Daines, 1981

Brown and Bakhtar, 1983

Williams & Loader, 1993

Pennington, 1994

Questions to and from students--feedback

- **Avoid picking on reluctant individuals**

- **Use a method of pre-warning students you will be asking them (e.g. colour of clothing)**

- **Ask questions to students from different parts of the room**

- **Always repeat students' questions and answers before responding to them**

- **Limit questions per person so no one hogs air time**

(adapted from Prof Sally Brown, workshop at Queen's, 3/2/2006)

Lecturing to your peers

The goal is to share your knowledge......

Think of a lecturer who has impressed you. It might be a colleague or someone who has taught you (do it just like a **pulmonary grand rounds**) .

What qualities does this lecturer possess?

Make a list of the characteristics of a good lecturer

Signposting

Signal the direction structure of the lecture

"**Today we will examine four approaches to the management of tumours:**

1. **Surgery**
2. **Radiotherapy**
3. **Chemotherapy**
4. **Psychological support**

We will consider each in turn, identifying their strengths and weaknesses"

Foci

These are statements which highlight and emphasise key points.

"The basic pharmacological principle underlying chemotherapy is....."

Links

These are statements that link the sections of the lecture together.

"From this you can clearly see that chemotherapy is often as aggressive and invasive as the older techniques of excision and radiotherapy"

Frames

These are the statements which delineate the beginning and ending of topics and sub topics and are a subset of links.

"Let's now consider the uses of chemotherapy"

Openings and Closures

Openings

- **Grab and hold attention**
- **Establish rapport**
- **Indicate content and structure of lecture (learning outcomes)**
- **Link with previous lectures and/or reading material**

Closures

- **Reemphasize key points**
- **Show links to subsequent lectures, reading materials etc.**

Lecturing to Experts

"Where facts are few,

experts are many."

Donald R. Gannon

"An expert is a person who has made all the mistakes that can be made in a very narrow field."   Niels Bohr

专家是一个在狭窄领域内犯下所有可能的错误的人。玻尔

Lecturing to Medical Experts

- They are here to judge you

- They really know a lot (more experiences, more reading, some are in the guideline authors group)

- Structure your lecture(esp. for shorter talks)

Experts

Five ways to structure a lecture

- **Classical-hierarchial**

- **Problem-centred**

- **Chaining/Sequential**

- **Comparative**

- **Thesis**

Critical review Series No 2

Brown and Atkins 1988

Tips: One size fits all

- Be precise. "(Good teaching is one fourth preparation and three fourths theater." Gail Godwin-**NOT for medical data sharing.)**

- Use eye contact, voice modulation, and animation (yours, not PowerPoint's)

- Take chances (but be tasteful)

- Emphasize key points
  - "If you only remember one thing..."

Effective Habits

- Outline the talk before opening any presentation software

- Scientific Presentation
  - Background
  - Objective
  - Methods
  - Data
  - Discussion

Effective Habits: outlines

Topic-based Lecture

- Intro
- Epidemiology
- Clinical Features
- Diagnostics
- Treatment
- Areas of study
- Review

Case-based Lecture

- Intro
- Case 1
- Teaching point
- Case 2
- Teaching point
- Lather & repeat
- Review

Effective Habits

- Prepare in advance!
    - "It usually takes more than three weeks to prepare a good impromptu speech."   Mark Twain

- Practice
    - Particularly the introduction

- Peer review
    - Is the story coherent?
    - Is the presentation of data clear?
    - Eliminate graphical errors

PowerPoint Tips

- Use PowerPoint

  - 95% market share

  - Presentation software options:

    - PC/Mac/UNIX: OpenOffice by Sun

    - Mac: Keynote

  - Can be difficult to share

  - Potential for formatting surprises

- Most conferences require .ppt

Savvy Slides (K.I.S.S.)

- Dark background, light text
- Consider using bold for all fonts
- Shadowed text is more readable
- Use font size 24 or greater
- Use easy to read fonts
  - Arial
  - Times New Roman
  - Comic Sans MS
  - English 111 Vivace BT

Savvy Slides (44 point)

- ## Arial 36
  - ### Arial 28
    - Arial 20

- ## Comic Sans MS 36
  - ### Comic Sans MS 28
    - Comic Sans MS 20

- ## Times New Roman 36
  - ### Times New Roman 28
    - Times New Roman 20

Backgrounds

- Readable, classic

- But, fatiguing over time

Backgrounds

- Annoying, pointless background
- Poor contrast

- High contrast is minimally better

- Wow, what a great lecture

Slide Content

- About one minute per slide
  - This ratio increases as the length of the talk increases

- 5-8 lines of text per slide

- Simplify information (on the slide!)

  - More Hemingway than Bulwer-Lytton
  - More haiku than Dante

Slide Content

- For goodness sakes, don't read your slides!

- Avoid Speaker/text dissonance

- Use animations sparingly

PowerPoint Tips

- Attention span may be 10-15 minutes
  - Perhaps less in the age of Social Media/Wechat

- Various techniques to re-engage the audience

Presentation of Data

- PowerPoint conveys data at relatively low bandwidth

Tables, Charts, and Graphs

- Avoid tables & figures from journals – they do not project well

- Tables & figures should be clearly labeled, and make sense at a glance

- Orient the audience & walk them through the data

Tables, Charts & Graphs

- You've failed if you have to begin with an apology

- Limit data to what is necessary to convey your point
  - But don't deceive

- Highlight key points

ACE Inhibitors and Mortality Reduction

Mortality

Trial	ACEI	Controls	RR (95% CI)
Chronic CHF			
CONSENSUS I	39%	54%	0.56 (0.34–0.91)
SOLVD (Treatment)	35%	40%	0.82 (0.70–0.97)
SOLVD			
Post MI			
SAVE			
AIRE			
TRACE			
SMILE	6.5%	8.3%	0.78 (0.52–1.12)
Average	**21%**	**27%**	**0.77**

Make another point with text box or highlighting

Garg R et al. JAMA. 1995;273:1450–1456.

Take Home Points

- Be knowledgeable, enthusiastic, and animated

- Focus on a few take home points

- Legible slides (and don't read them!)

- Pay particular attention to the presentation of data

- 10 minute talk is like an oral case presentation – structure counts

Delivery of a large lecture

- **Capturing audience' attention from outset**
  - **relevant examples**
  - **topical references**
  - **controversial statements**
  - **visuals, e.g. cartoons**
  - **humour (?)**
- **Making eye contact round the room (lighthouse)**
- **Checking your audibility**
- **Checking visibility of visuals: font, graphics**

Delivery of a large lecture

- Moving around, e.g. standing in front of lectern, walking up aisle

- Pacing delivery appropriately

    – How much content is essential?

    – Is there time for note-taking?

    – Do students have time for reflection?

    – Is there time for questions or interaction?

Management of large lectures

- **Developing "crowd control" strategies**

  – **Managing late comers, phones etc**

  – **Establishing procedural rules, e.g. for starting, stopping, bringing to order**

- **Varying learning experiences**

  – **Interspersing presentation with activities**

  – **Using video, multi-media, models, case studies etc**

THANK YOU!