

INTERNATIONAL SYMPOSIUM ON NEW DEVELOPMENTS IN NEUROFIBROMATOSES AND RASOPATHIES

Their Management, Diagnosis, Current and Future Therapeutic Targets

27th - 29th November 2017, Crowne Plaza, Kochi, Kerala, South India

INSTRUCTIONS & GUIDELINES FOR POSTER PRESENTATION

Dear Colleague,

Please find below instructions and guidelines which you may find useful. We suggest that you read this document in its entirety as it contains important information on presenting your poster and the structure of the day, as well as an explanation of how the prizes will be awarded.

1. Size, orientation and design:

- a. A1 size (594 x 841 mm or 23.4 x 33.1 inches)
- b. Portrait format
- c. Any colour, typeface (font), design acceptable
- d. Lamination – optional

Some suggested guidelines on preparing your poster are provided in the latter part of this document.

RECOMMENDED GUIDELINES FOR PREPARING YOUR POSTER

Divide your content into sub-headings. For example, for a case report these might be:

- History
- Examination
- Investigations
- Management
- Outcome
- Discussion
- References

Within each of these sections, think about how you will present the information. Excessive written text on a poster can be overwhelming and deter people from reading it. Consider if the information can be presented in another way: for example, could investigations be put into a time-line, flowchart or table; or could you display your differential diagnoses as a spider diagram rather than as a list? You may also want to consider if the information can be depicted rather than described. Some examples are shown below:

"When the patient arrived they had various blood tests including LFT's, TFT's, FBC, and U&E. The results showed haemoglobin of 5.6g/dl, hyperkalaemia, raised urea and excess free T4. LFT's were normal."



Test	Result
TFT	Raised T4
FBC	Hb 5.6g/dl
U&E	Raised urea
LFT	NAD

"The aetiology for the formation of caput medusa is illustrated in Figure 1".

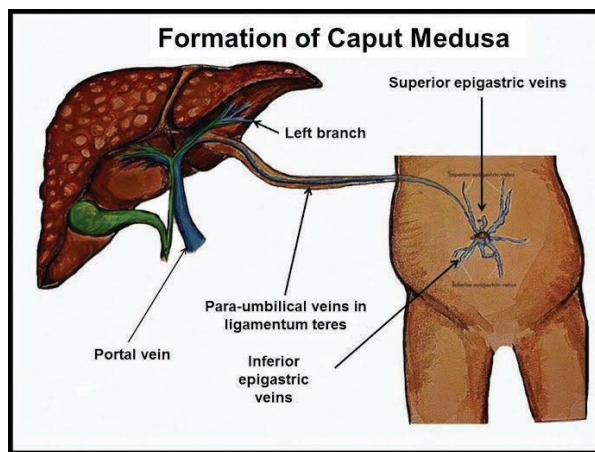


Figure 1

"The causes of ischaemic colitis is schematically represented and described in Figure 2".

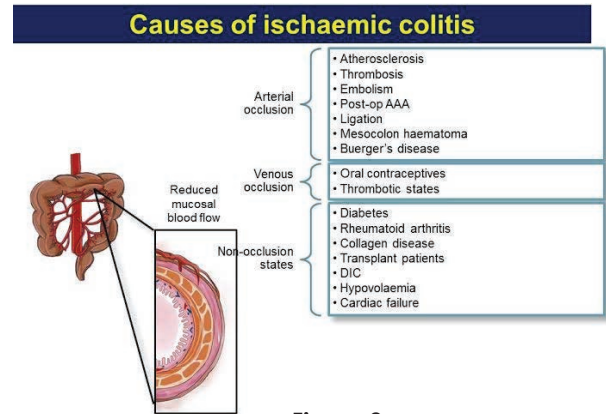


Figure 2

"The patient's parents were first cousins and so the marriage is considered consanguineous. She has two older sisters, both of whom are fit and well."

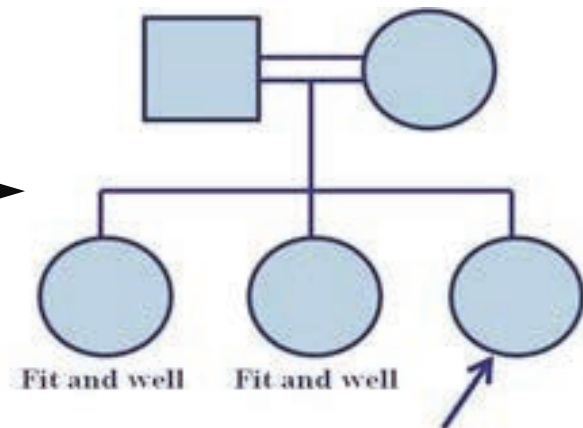


Figure 3

This reduces the amount of text on your poster making the information easier to take in. You may find facilities, such as the 'SmartArt' facility, which is available on most Microsoft software, useful for this. Diagrams also add colour – although make sure you have a colour scheme that is appropriate. Avoid colours that clash, or are garish, and ensure that they are neither too light nor too dark. Dark backgrounds are usually best avoided. Ensure you can read the text both in terms of colour and size. A white background and black text appears most professional and with regard to the additional colours, most applications will have 'themes' where a complimentary array of colours can be selected. A reasonable minimum size for text that can be read easily in an A1 size poster is font size '16'.

Two examples of posters that are structured and designed in a pleasing and informative manner are shown below.

An example of displaying a clinical study as a poster.

Population Results for Ruptured Abdominal Aortic Aneurysm: A Propensity-Scored Analysis

Jones M, Robert J, Hasan L
University Hospital of North Birmingham



Aims

1. Determine current uptake of EVAR for non-elective AAA
2. Quantify differences in early survival between EVAR and OAR for rAAA
3. Delineate the relationship between rAAA outcomes and elective AAA workload
4. Quantify palliation rates and the effect on aneurysm-related mortality

Methods

- rAAA: procedure < 24hrs of rAAA diagnostic code
- Urgent AAA: procedure >24 hrs of nonelective admission

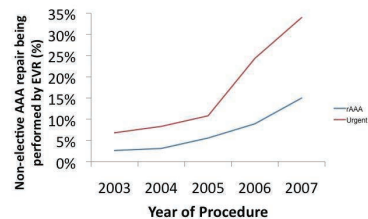
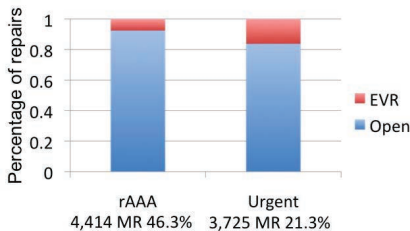
OAR-EVAR Comparison

- Direct risk-adjusted comparison (logistic regression)
- Propensity scored analysis (case matched strata)

rAAA Service Provision

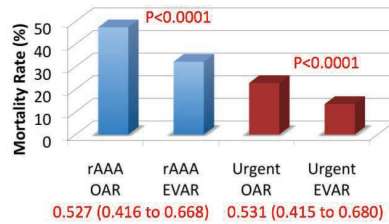
- Hierarchical logistic regression
- Relationship of rAAA to elective workload quintiles
- Palliation rates

Results



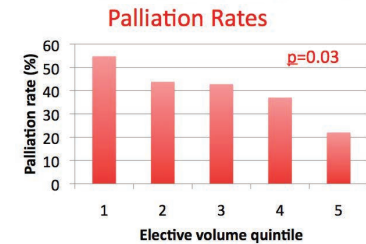
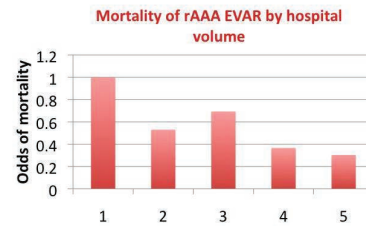
Effect of EVAR on mortality

- EVAR associated with significant mortality reduction in propensity-scored analysis OR 0.575; 95% CI 0.425-0.778; $p < 0.001$
- Hospitals performing a higher proportion of EVAR electively had lower mortality rates for rAAA by Open repair ($p < 0.0001$) EVAR ($p < 0.0001$)



rAAA outcomes and workload

- Best results were in hospitals performing 29 rAAA repairs per annum (OR 0.664; $p < 0.0001$)
- A hospital performing 50 elective cases per annum, by any method, conferred odds of 0.61 on any rAAA case ($p < 0.0001$)



Conclusion

- Elective workload relates to non-elective outcomes
- Palliation rates differ between high-volume and low-volume hospitals
- EVAR delivers lower mortality than OAR for rAAA



An example of displaying a laboratory study as a poster.

IDENTIFYING THE MOLECULAR AND GENETIC BASIS FOR NON-HEALING WOUNDS, SCARLESS HEALING AND SCARRING



*†Robert S, *Ludowrth PE, *Thirunavukan KG, †Thompan D, †Steven P
 †University of Melbourne and *Adelaide Medical School
 Australian Group of Universities.



BACKGROUND

Oral mucosal wounds are characterised by rapid re-epithelialisation, remodelling and early healing compared to normal skin wounds. In addition, oral mucosal wounds seldom develop scarring or contractures.

DIFFERENTIAL WOUND HEALING

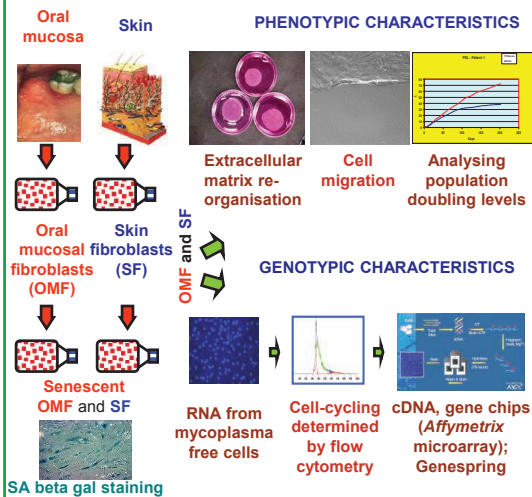


Scarless healing (Oral mucosa) Scarring and non-healing (Skin)

AIMS

- (i) To investigate the phenotypic characteristics and gene transcription profiles of oral mucosal fibroblasts (OMF) and patient matched skin fibroblasts (SF).
- (ii) To delineate the *in-vitro* ageing profiles of these cells.

EXPERIMENTAL APPROACH

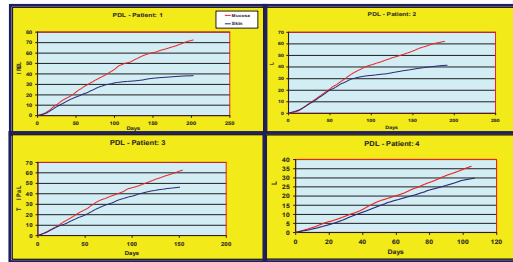


CONCLUSIONS AND FUTURE WORK

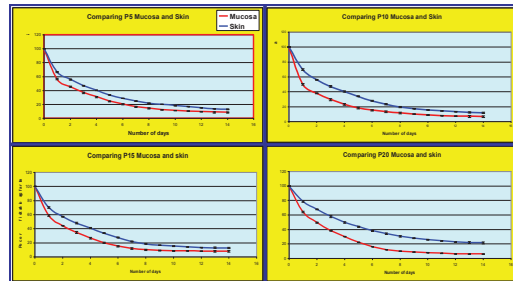
- ☒ Oral mucosal fibroblasts demonstrate an increased ability to proliferate, repopulate wounds and reorganise their surrounding ECM environment – key stages of the wound healing process.
- ☒ This may reflect the involvement of oral mucosal cells in scarless wound repair.
- ☒ The differences in gene expression between oral mucosal and skin fibroblasts will provide pathways for further investigations into the distinct nature of fibroblast populations and how dysfunctional wound healing may be ameliorated in the future.

RESULTS

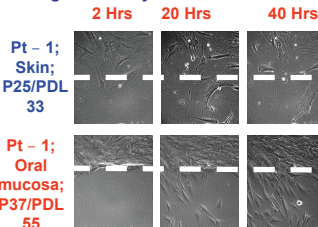
1. SF undergo less population doublings compared to OMF and they senesce earlier



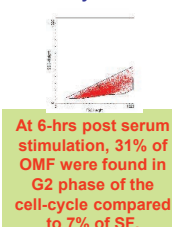
2. OMF have an increased ability to reorganise the ECM (using fibroblast populated collagen lattices)



3. The ability of SF to migrate and repopulate a wound decreases at a much earlier passage, demonstrated here using a mono-layer scratch wound model



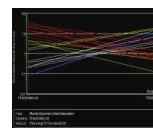
4. OMF progresses more rapidly through the cell-cycle



5. Gene expression differences between OMF and SF have been demonstrated (n=4)

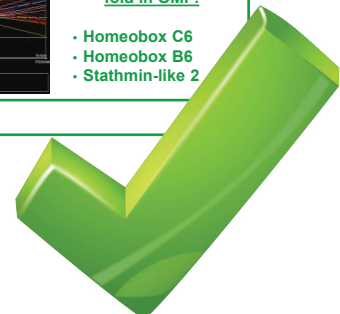
Upregulated > 5-fold in OMF:

- HGF
- Endothelin rec ty B
- Glypican 3



Downregulated > 5-fold in OMF:

- Homeobox C6
- Homeobox B6
- Stathmin-like 2



An example of a poorly structured poster.

Post-Operative Drugs Management – An Evaluation of Medical Students Awareness and Knowledge

Robertson J

Introduction

•Post-operative drug management is easily overlooked. Many patients attending hospital are prescribed polypharmacy.
•A post-operative drug history is extremely important in preventing post-operative complications as a result of mismanagement.
• Many drugs can be safely continued throughout the peri-operative period with the last dose taken with sips of water up to 2 hours before surgery'.
•In some cases failure to continue a patient's routine medication can cause an exacerbation of their chronic condition or unpleasant side effects due to drug withdrawal.
•Other drugs are known to interact adversely with anaesthetic agents or affect the surgical operating conditions and therefore it is vital that the necessary changes to a patient's drug regime is made in a timely manner so as to not adversely affect the patient's health nor increase their risk of developing post-operative complications.

•AIM
To assess students knowledge of pre-operative drug management.

Methods

•An ethically approved questionnaire survey was distributed at a large district general hospital.
• Completion of questionnaires was supervised to reduce ascertainment bias.
•Knowledge of 21 common cardiovascular, respiratory, gastrointestinal and hypoglycaemic agents was assessed.
•Limited evidence suggests that metformin may prevent the cardiovascular and possibly the cancer complications of diabetes. It helps reduce LDL cholesterol and triglyceride levels and is not associated with weight gain; in some people it promotes weight loss it is the only antidiabetic possibly associated with reduced risk of cardiovascular complications in those with type II diabetes mellitus. Metformin is one of only two oral antidiabetics in the World Health Organization Model List of Essential Medicines (the other being glibenclamide).
•First synthesized and found to reduce blood sugar in the 1920s, metformin was forgotten for the next two decades as research shifted to insulin and other antidiabetic drugs. Interest in metformin was rekindled in the late 1940s after several reports that it could reduce blood sugar levels in people, and in 1957, French physician Jean Sterne published the first clinical trial of metformin as a treatment for diabetes. It was introduced to the United Kingdom in 1958, Canada in 1972, and the United States in 1995. Metformin is now believed to be the most widely prescribed antidiabetic drug in the world; in the United States alone, more than 48 million prescriptions were filled in 2010 for its generic formulations.



Methods

•Students were asked if they were aware of local hospital guidelines on the management of pre-operative drugs.
•Students were asked whether they thought the drugs should be stopped pre-operatively, for what duration and when the treatment should be restarted.

Results

•101 Students of varying grade and specialty completed the questionnaire ranging from Year 1 to 5. Of these 19 (19%) were pre-clinical and 82 (81%) were from post-clinical years.

•51%, 67% and 50% said they would stop hypoglycaemic agents Insulin, Metformin and Gliclazide respectively. All of the Students that stopped Insulin and Gliclazide stated that they should be re-started either day 1 post-op or when the patient is eating. For Metformin 82% would re-start at day 1 post-op, and the remainder would re-start on day 2 or 3.
In a clinical trial of 286 subjects, 53.2% of the 141 given immediate-release metformin reported diarrhea, versus 11.7% for placebo, and 25.5% reported nausea/vomiting, versus 8.3% for those on placebo.
Metformin was associated with a 4,27 significantly higher incidence of gastrointestinal disturbances than placebo in 5 trials in women with poly cystic ovary syndrome.
Gastrointestinal upset can cause severe discomfort; it is most common when metformin is first administered, or when the dose is increased. The discomfort can often be avoided by beginning at a low dose (1 to 1.7 grams per day) and increasing the dose gradually. Gastrointestinal upset after prolonged, steady use is less common.
•77%, 91%, and 96%, stated they would stop the common anti-platelet/coagulant drugs Aspirin, Clopidogrel and Warfarin respectively. How many days these would be stopped for ranged from 1 to 10 days. Also included are the results for less common thrombolytic drugs Pletal, Dipyridamole and Asasantin, which would be stopped by 13%, 45%, and 55% respectively.
There are at least two different types of cyclooxygenase: COX-1 and COX-2. Aspirin irreversibly inhibits COX-1 and modifies the enzymatic activity of COX-2. COX-2 normally produces prostanoids, most of which are proinflammatory. Aspirin-modified PTGS2 produces lipoxins, most of which are anti-inflammatory. Newer NSAID drugs, COX-2 inhibitors (coxibs), have been developed to inhibit only PTGS2, with the intent to reduce the incidence of gastrointestinal side effects. However, several of the new COX-2 inhibitors, such as rofecoxib (Vioxx), have been withdrawn recently, after evidence emerged that PTGS2 inhibitors increase the risk of heart attack and stroke. Endothelial cells lining the microvasculature in the body are proposed to express PTGS2, and, by selectively inhibiting PTGS2, prostaglandin production (specifically, PGI2; prostacyclin) is downregulated with respect to thromboxane levels, as PTGS1 in platelets is unaffected.

Results

•It is evident from this study that the majority of Students are not aware of local hospital guidelines for pre-op drug management.

•Salicylic acid is a weak acid, and very little of it is ionized in the stomach after oral administration. Acetylsalicylic acid is poorly soluble in the acidic conditions of the stomach, which can delay absorption of high doses for eight to 24 hours. The increased pH and larger surface area of the small intestine causes aspirin to be absorbed rapidly there, which in turn allows more of the salicylate to dissolve. Owing to the issue of solubility, however, aspirin is absorbed much more slowly during overdose, and plasma concentrations can continue to rise for up to 24 hours after ingestion.

Conclusion

•This study has shown that knowledge of pre-operative drug management is insufficient and could be detrimental. Examples include; continuing Metformin which carries a risk of hypoglycaemia and lactic acidosis peri-operatively; not stopping Clopidogrel and Warfarin increases the risk of haemorrhage and death.
•Mismanagement of these drugs is negligent. With the ever evolving pharmacology of drugs in today's practice it can be difficult for health professionals to maintain an adequate knowledge of drug management. It is therefore imperative that guidelines are produced and all Students are aware of them.
•About 50–80% of salicylate in the blood is bound to albumin protein, while the rest remains free, active, ionized state; protein binding is concentration-dependent. Saturation of binding sites leads to more free salicylate and increased toxicity. The volume of distribution is 0.1–0.2 l/kg. Acidosis increases the volume of distribution because of enhancement of tissue penetration of salicylates.
• Gliclazide is an oral hypoglycaemic (anti-diabetic drug) and is classified as a sulfonylurea. Gliclazide is the research of SERVIER- A French Multinational. In India original Gliclazide marketed in original Brand name as " Diamicro XR 60 " by SERVIER subsidiary SERDIA Pharmaceuticals, while other companies promote copies are "Glicid", "Glyloc" and "Reclide" in India. Gliclazide was shown to protect human pancreatic beta-cells from hyperglycemia-induced apoptosis. It was also shown to have an antiatherogenic effect (preventing accumulation of fat in arteries) in type 2 diabetes

Place of study, logos and acknowledgement missing

Graph too complex and too much of information

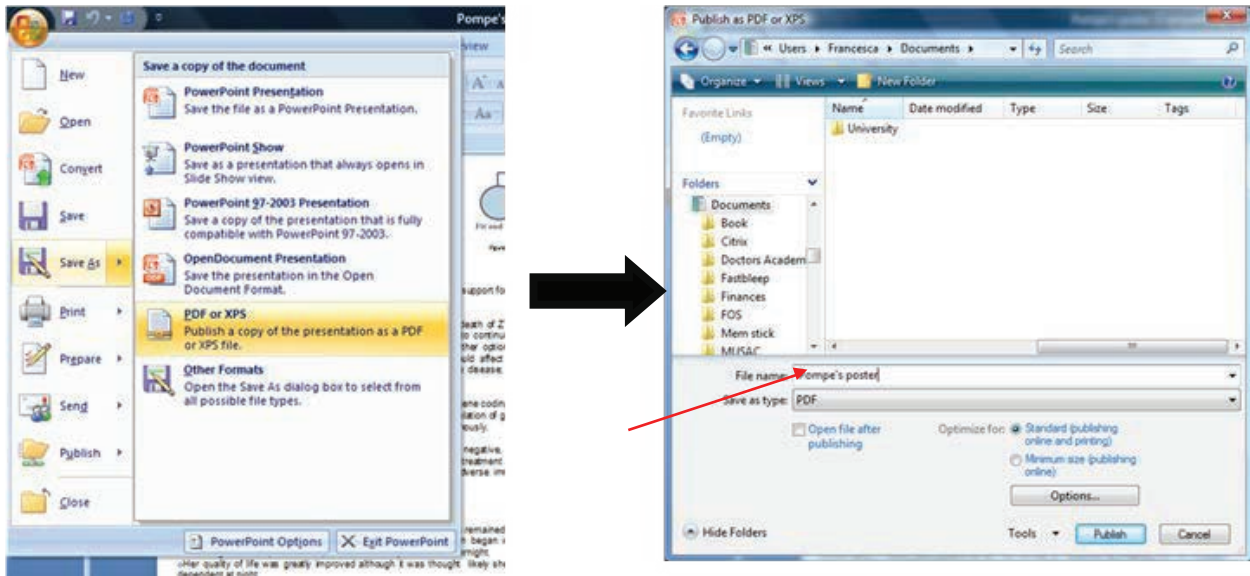
Unnecessary and meaningless image

The whole poster is too wordy with large amount of text and very few illustrations.



Illegible graph that is too small to visualise.

Institutions such as Universities or Hospitals usually have guidelines regarding the placement and sizing of their logo on posters. These should be sought out and adhered to. You should also ensure that you recognise all contributors to the work and include their institution. It may be preferable to include their job title.



We hope this information is helpful and answers any concerns and queries you might have. Should you have any further queries, please feel free to email us at conference@doctorsacademy.org.uk or info@doctorsacademy.org.uk

Congratulations once again and we look forward to welcoming you to the conference.

With very best wishes,

Organising Committee

International Symposium on New Developments in Neurofibromatoses and RASopathies

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