

94. THE METASTATIC EARLY PROGNOSTIC (MEP) SCORE: A NOVEL SCORING TOOL FOR PREDICTING EARLY MORTALITY IN PATIENTS WITH METASTATIC PROXIMAL FEMORAL (HIP) FRACTURES

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Background: The early mortality in patients with hip fractures from bony metastases is unknown. The objectives were to quantify early (30 and 90-day) mortality in patients with proximal femoral (hip) metastases and create a mortality prediction tool based on biomarkers associated with early death.

Methods: This was a retrospective cohort study of consecutive patients referred to orthopaedics at a UK trauma centre with a proximal femoral metastasis over seven years (2010–2016). The study group were compared to a matched control group of non-malignant hip fractures. Minimum follow-up was one year.

Results: 195 patients with hip metastases were compared to 192 age and gender-matched controls. 90-day mortality was 46% in patients with metastatic hip fractures versus 12% in controls (89/195 and 24/192 respectively, $p < 0.0001$). Mean time to surgery was longer in impending versus completed fractures (9.3 and 3.5 days, respectively $p < 0.001$). Albumin, urea and calcium were all independent predictors of mortality and were used to generate a tool for predicting 90-day mortality, titled the Metastatic Early Prognostic (MEP) score.

A MEP score of 0 was associated with the lowest risk of death at 30 days (14%), 90 days (19%) and one year (62%). MEP scores of 3/4 were associated with the highest risk of death at 30 days, 90 days and one year (56%, 100% and 100%, respectively).

Conclusions: This score could be utilised to predict early mortality and guide perioperative counselling. The delay to surgery identifies a window to intervene and correct these abnormalities with the aim of improving survival.

95. METASTATIC BONE DISEASE, ESTABLISHING A NEW REFERRAL PATHWAY AT UNIVERSITY COLLEGE LONDON HOSPITAL, UCLH

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Background: The British Orthopaedic Oncology Society (BOOS) guideline on Metastatic bone Disease (MBD) recommends that data should be collected accurately to improve quality of care.

Method: From January to July 2016, record collected using Electronic Handover system. Cases were matched with the clinical coding list of cancer patients.

Results: 32 cases were identified during the study period; all were discussed in the daily trauma meeting and a management plan given to the referrer. Conservative treatment was decided in 23 cases while 9 patients had a surgical intervention. In the non-operative group, the reported outcome was death in 9 patients, 1 discharged back to GP, and 3 to continue orthopaedic follow up. The remainder discharged back to the referrer to continue treatment. In the intervention group, there were 2 complex primary Hip Replacements, and Intramedullary fixation in 2 femurs, 3 Humerii, and 2 Radii. Out of 306 clinical episodes recorded for these 32 patients, only 11 were registered under orthopaedics.

Discussion: To start a new comprehensive database for MBD cases; a new referral proforma was introduced. It was made accessible on the Trust's Intranet in Word format. An email address was set up and accessed by the on call orthopaedic team. Referrals would be discussed in the trauma meeting next day. The outcome of the discussion would be documented in the form and saved in a specific folder on the orthopaedic-shared drive.

Recommendation: BOOS guideline should be followed to provide a minimum standard of practice for MBD patients.

97. QUALITY IMPROVEMENT PROJECT ON JUNIOR DOCTORS FEEDBACK ON ORTHOPAEDIC ROTA IN A MAJOR TRAUMA CENTRE

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Objective: To assess frequency of cross cover of orthopaedic teams, its effects on patients' safety, senior support within the department, teaching and clinical opportunities.

Method: 20 questions questionnaire was emailed to 18 junior doctors (F1 – CT2) working in department in March 2019 and July 2019.

Results: 1st cycle highlighted increased frequency of cross cover of different orthopaedic teams.

Questions	1st cycle	2nd cycle
Frequency of cross cover other teams (6-10, 11-15 times/wk)?	22 %	11%
No. of different teams covered in 1 wk?	60% - 3 teams	30% - 3 teams
Notice given before cross cover?	40% same day	30% same day
Notified via colleague or email or rota?	55% - Rota	60% - Rota
Senior ward round on base team, daily, sometimes, once/wk?	38% - Most days	55% - Most days
Senior ward round on other teams, daily, sometimes, once/wk?	38%- sometimes	25%- sometimes
Senior support on base team, always, usually, sometimes?	44%- always	61%-always
Senior support on other teams, always, usually, sometimes?	38%- usual	25%- always
Is it difficult to get protected teaching time?	70%- Yes	
Any issues with new rota?		61%- No
Block of on call vs random on call days?		67%- Block

Blocks of on call days were introduced in the rota from Apr'19 to Aug'19. Registrar was assigned to implement teaching timetable and protected time was allocated. Whatsapp groups were introduced to improve communication and ward rounds were assigned to senior registrars. 2nd cycle results showed improvement in frequency of cross cover and senior support.

Conclusion: This project is a 1st step towards better training. It highlighted the areas for improvement and goals were set to improve things for future trainees.

98. IMPROVING LUNG CANCER PATHWAY - THE SIGNIFICANCE OF MARGINAL GAINS

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Background: The National Optimal Lung Cancer Pathway (NOLCP) guidelines was published recently. The aim of NOLCP is to encourage local services to review their pathways.

We wanted to engage with NOLCP, and review our lung cancer pathway for patients with potentially resectable cancer.

Methods: We carried out a retrospective review from June to December 2017. Data was collected from hospital electronic records.

Results: The initial results showed poor compliance. We made several changes from 2-week wait (2WW) clinic:

1. Prioritizing performing transfer factor for patients with newly diagnosed, potentially radically treatable lung cancer in clinic
2. Standardising CT reporting to include staging and feasibility of percutaneous tissue biopsy in report to enable appropriate tests to be requested early