

### **Service Priorities and Programmes**

#### **Electronic Presentations**

Convention ID: 162 Submitting author: Dr KIN WAI CHAN Post title: Associate Consultant, Princess Margaret Hospital, KWC

# Colorectal Cancer Symptom Score using a visual aided colour card for Per Rectal Bleeding (PRB) and its associated symptom can estimate the risk of Colorectal Cancer.

Chan KW (1), Carlos KH Wong (2), Lai PY (1), Luk W (1), Yiu YK(1) (1) Department of Family Medicine and Primary Health Care, KWC. (2) Department of Family Medicine and Primary Care, HKU.

### Keywords:

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### **Introduction**

In the public hospital, the waiting time of the referral to be seen by Surgical Outpatient Clinics varies between 2 weeks (urgent appointment) to 75 weeks (routine appointment). Per rectal bleeding (PRB) is the most common reason for referral and the most common symptom presentation of the colorectal cancer (CRC). It is difficult to judge whether the referral should be urgent, early or routine just by the existing method of symptom description of the colorectal symptom.

## **Objectives**

1) To use a colour card with light to dark red colour for history taking and find if this visual aid method can help to predict the risk of CRC. 2) To design a symptom scoring algorithm and nomogram to predict the risk of CRC for patient presented with PRB and other colorectal symptoms.

## Methodology

A prospective observational study on 325 patients aged 40 or older, presented with PRB to the Family Medicine Specialist Clinic (FMSC) who underwent a lower GI endoscopies subsequently from December 2012 to September 2013.We collected information including age, sex, smoking status, BMI, family history of CRC, any symptom change in bowel habit, any change if stool form or consistency, any weight loss and change in hemoglobin level. The patients were shown by the physician a colour card composed of 4 numbered colours from the brightest red (colour code 1) to the darkest red (colour code 4), and were invited to point to a specific colour that was a best approximate to the colour of the PRB. Lower GI endoscopies were performed to investigate the cause of the PRB. Stepwise logistic regression was conducted to identify significant risk factors, and construct scoring algorithm for prediction of CRC.

## <u>Result</u>

We found that the dark colour change of the PRB (code 3,4), change in bowel habit

and age are statistically strongly significant associated with the presence of the CRC (p<0.001). These positive risk factors were used in the calculation of the risk score for prediction of CRC and were formulated into a table and plot as a nomogram. Based on the risk calculated by the nomogram, we drew an algorithm to categorize the referral urgency of PRB into routine, early and urgent appointment. We conclude that using colour card and the risk scoring algorithms can help us to prioritize the resource to work up for patient presenting with PRB more efficiently.