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CORRECT HAND PALPATION–A PROVEN CASE TO DETECT MALIGNANCY

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ABSTRACT

Gastric tumour if large enough can be suspected from proper abdominal examination. It can easily be missed if the doctor did not perform correct examination technique. A 59-year-old man, no known illness presented with isolated symptoms of abdominal pain for three weeks. He had sought attention to two primary care clinics and was reassured to have dyspepsia. However, his symptoms did not resolve. In line with WHO approach in primary care, we proceed with thorough clinical examination. Despite subacute presentation of less than one month, surprisingly there is a palpable mass at his epigastric area with irregular margin. Without initial imaging study, we referred this case urgently to the surgical team with a high possibility of gastric malignancy. Urgent CT scan was performed in which huge mass arising from posterior wall of stomach was revealed. He was then successfully managed with total gastrectomy and esophagojejunostomies. Postoperatively, he recovers well and benefit regular surgical follow up. This case highlights the importance of clinical examination in all cases that come to our attention. It might be missed if every medical professional assumes dyspepsia as gastritis and comes into diagnosis without proper examination.

INTRODUCTION

Hand palpation refers to the clinical process of assessing the patient's physical part using palmar surfaces of the doctor's fingers and hands (Talley& O'Connor, 2010 & Mealie & Manthey, 2020). Hand palpation is an essential step in routine physical assessment performed by a medical doctor, specifically in abdominal examination (Talley& O'Connor, 2010). It is among the initial steps in bedside medical practice. Furthermore, it has always been thought during medical undergraduate training and reflects competency of the person before eligible to practice as clinicians. While increasing rapport with patients, the clinician has the opportunity to analyse important clinical information through the careful use of this palpation during the physical examination.

Most patients with underlying gastric malignancy are asymptomatic in the early phase and may come with advanced disease during clinical visit. However, in the minority of cases, gastric tumour if large in size can be felt from thorough abdominal palpation over the epigastric area. It can present as a vague abdominal tenderness or discomfort in more than 70% of cases which can easily be missed if the doctor is not critical in assessment and not practicing correct abdominal examination techniques in daily practice (Mansfield, 2011). Thus, adequate and systematic examination should not be avoided in clinical practice especially when assessing the patient for the first visit.

From primary care assessment, imaging studies are not a compulsory investigation to be arranged prior to referral (Yusuf, 2009 & Guan,Ho & Ng *et al.*, 2014). In fact, adequate history taking, and thorough clinical examination are important enough for the clinician to make probable diagnosis and proceed with necessary referral even if the patient does not present with any alarming symptoms. Therefore, individualized clinical approach in dealing with abdominal symptoms at primary care is indeed essential without delaying the ultimate treatment required by the patient.

CASE REPORT

A 59-year-old man, no known medical illness presented to our clinic with symptoms of upper abdominal discomfort for three weeks. Atypically, he had no other common gastrointestinal symptoms such as vomiting, nausea, early satiety or abdominal distension. He also had no alarming symptoms such as loss of weight or appetite. He had no symptoms of anaemia or history of

blood loss. He is a non-smoker and not on any pain killer. He had no family history of malignancy. He had visited to two health clinics previously and was informed to have dyspepsia. He was prescribed with antacids medications from previous clinicians, but his condition did not resolve completely.

Fulfilling the recommendation set by the World Health Organization (WHO) on approach in primary care, we proceed further with proper clinical examination starting from periphery to abdominal system. Unexpectedly, there was a palpable mass at his upper abdominal area with irregular margin. The mass was firm to hard in consistency with slight tenderness. We immediately referred this case to the surgical team with a high possibility of gastric malignancy. Our strong clinical impression did not require any supportive initial imaging from primary care level. Without any delay, the patient was admitted and CECT abdomen was arranged. A huge mass was revealed at the upper abdomen arising from the posterior wall of his stomach as shown in Figure 1. He then was successfully managed with total gastrectomy and esophagojejunostomies, rehabilitation and recovers well with nursery care.

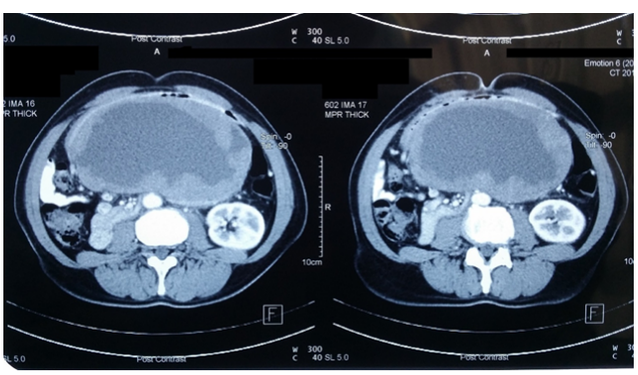

Figure 1: CECT image of the patient's abdomen, reveals mass arising from the posterior wall of stomach.

DISCUSSION

Typical gastric tumour presentations include early satiety, abdominal pain, nausea and vomiting. Therefore, it may mistakenly be diagnosed with dyspepsia such as acute gastritis or gastroesophageal reflux disease during initial presentation. In primary care, presence of alarming symptoms require referral for hospitalization (Yusuf, 2009 & Guan,Ho & Ng *et al.*, 2014). The ALARMS is the mnemonic for the red alarm symptoms, in which 'A' refers to symptoms of anaemia, 'L' refers to significant weight loss, 'A' refers to reduced appetite or anorexia, 'R' refers to sudden onset of symptoms progression, 'M' refers to presence of melaena with or without hematemesis and 'S' refers to presence of difficulty in swallowing.

However, one of the alarms criteria that still present in this patient and should not be missed is his age of more than 50. If a patient's age falls in this group, more precautions should be made especially regarding the plan for discharge, follow up or referral. Furthermore, he had presented for the third visits of similar complaints to primary care, in which the diagnosis should be revised. Approaches in assessment always begin with history and physical examination. No provisional diagnosis can be made if based on history only – in which the accurate diagnosis could be missed. Even if the abdominal examination is done, it should be performed properly and systematically according to the usual standard (Verghese, Charlton, Kassirer, Ramsey & Ioannidis, 2015).

Common mass to be palpated on abdominal examination is usually the lower edge of the liver. Epigastric mass is indeed rare and should not be palpable in a normal person (Talley & O'Connor, 2010 & Mealie & Manthey, 2020). Because of its rare occurrence, it might not be appreciated by inexperienced clinicians. Nevertheless, the effort to look for the mass should be made especially in a person that falls in a high-risk group as in this case. Similar to the famous quote "What the mind does not know, the eyes cannot see", the alarming condition should be highly suspected in the first place, otherwise the clinician might overlook it.

Edge of hand and palmar surface are among the areas with highly sensitive touch. Soft palpation is intended for tenderness elicit meanwhile hard palpation intended for mass detection. By applying the hands over the abdomen in all nine quadrants, the chance for detecting presence of mass is definitely high (Talley & O'Connor, 2010 & Mealie & Manthey, 2020). Mass in the abdomen is an urgent indication for further investigation and management. It cannot be managed at primary care level and urgent shared care should be done. In terms of malignancy, if the mass is palpable, most of the time it signifies that the disease is already extensively progressing in which urgent intervention is needed. Indeed, our case had been intervened well. Thanks to the early detection by proper hand palpation at primary care level.

Conclusion

This case report illustrates the importance of thorough clinical assessment in all cases that came for primary care visits, regardless either benign or severe in presentation. This case has high possibility to be missed if most medical practitioners assume all abdominal pain are acute gastritis by default and conclude the final diagnosis without proper examination. This case highlights that a correct and adequate abdominal examination technique in a primary care clinic indeed can save the life of a patient who might die if the possible diagnosis has not been made thoroughly.

Ethics Statement

This case report is published with the consent of the patient.

Conflict of Interest

The authors have no potential conflicts of interest to disclose.

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