

# THE XIPHOID PROCESS IN CLINICAL MEDICINE

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Few references are to be found in medical literature to the association of the xiphoid process with disease (Glogner, 1961; Ensenstadt, 1967), nor is the xiphisternum or xiphoid process usually held by the ordinary doctor to play any etiological role in the causation of psychiatric disorder. The case reports of two patients are here presented. The first patient is especially interesting as she throws light on a centuries old Maltese medical custom, which is dying out and is now practised in the more isolated villages in the Maltese islands. The practice of this custom is more widespread than would be imagined as most patients are reluctant to admit to their doctors that they have already consulted an unorthodox village healer.

## Case 1

A woman in her sixties presented with a few weeks' history of upper abdominal localised tenderness and pain together with infrequent nausea and vomiting. There was associated loss of appetite. She also complained of mild flatulence. No definite relationship to food or to the type of food intake was noted. There was no change in bowel habits. There was mild weight loss.

The patient had been healthy all her life.

On examination the patient appeared very tense and agitated. Her B.P. was normal, and no abnormalities were found on clinical examination of her cardiovascular and respiratory systems. Severe localised tenderness was present in the upper epigastric region. Her liver and spleen were not palpable. The gallbladder region was not tender. No abdominal masses could be palpated. The patient expressed strong fears of developing "stomach cancer" and insisted on having a barium meal done privately in spite of being reassured that

there did not appear to be anything seriously wrong. Barium meal was normal and a working diagnosis of a severe anxiety state was made.

The cause was puzzling. Why should a patient who had been mentally stable all her life suddenly develop such a marked psychiatric reaction in late life?

On re-examination it was apparent that the upper epigastric tenderness seemed to originate from palpation of the xiphoid process. She was asked whether she had the habit of palpating it. She then shamefacedly admitted to palpating and trying to move the xiphoid process or "għasfur il-qalb" (literally the "heart bird") as she termed it.

After further questioning, her full story soon poured out. She revealed that she was a village healer who practised the traditional procedure of "l-irfigh l-għasfur il-qalb" (literal translation: "raising the heartbird" or xiphoid process). She had been practising for decades on patients who consulted her because of abdominal or digestive symptoms and pains. She had been taught the "art" by her mother who claimed that her family had a long tradition of healing, over successive generations. The patient strongly claimed numerous successes in alleviating other persons' symptoms and people would come for help both from her village and from other places.

In retrospect, her symptoms had started soon after a friend of hers, complaining of stomach pains, had asked her to carry out the traditional manipulation of "l-irfigh l-għasfur il-qalb". She had complied but had not succeeded in relieving the symptoms in spite of manipulations on different occasions. She had then heard that her friend was in hospital suffering from inoperable stomach cancer.

She tried to manipulate the xiphoid process on herself repeatedly without suc-

cess. The more she tried, the more tenderness developed in that region and the more anxious she became about her symptoms. She became convinced, on developing nausea and vomiting, that she was developing the same hopeless condition as her friend, because of the lack of manipulatory relief.

The real meaning of her symptoms and their cause were carefully explained to her.

Trifluoperazine 1mgm t.d.s. was prescribed because of her marked agitation. She was completely reassured. Her anxiety state had disappeared when she was seen again three weeks later.

### Case 2

A 19 year old girl was brought by her anxious mother because she was complaining of "heart pains" localised at the lower end of the sternum. There had been a severe attack of rheumatic fever a few years before and the patient and her mother had been warned in hospital about the possibility of a rheumatic activity recurrence. She felt tired and complained of breathlessness, which, on close questioning, turned out to be the inability to take a full inspiration because of her mental agitation. Physical examination was normal and nothing was found to indicate organic disease. The only abnormality was marked tenderness of her prominent xiphoid process. She admitted to repeatedly manipulating "l-ħasfur illqalb" and becoming extremely worried as she thought that the resulting increasing local tenderness pointed to ominous carditis. This patient's symptoms soon disappeared after complete reassurance, injunctions against further manipulations and the prescription of a mild tranquilliser.

### Discussion

These two patients illustrate first of all the ease with which the role of the xiphoid process in the production of symptoms may be completely overlooked. An erroneous diagnosis such as gastritis or even peptic ulcer can easily be made

by a busy doctor if a patient indicates with one finger the localisation of pain in the upper epigastric region. A wrong diagnosis would be all the more possible if the patient is fully clothed when describing the symptoms at the beginning of the interview.

Particular interest lies in the first case described because of the relationship to an ancient Maltese custom which is slowly dying out.

Many persons in the older age groups and hailing from different localities in the Maltese Islands were interviewed in order to obtain a better picture of the prevalence of and belief in this ancient custom. Details as to the actual manipulation procedures were also obtained from persons who practised it or who had had it carried out on them.

The various descriptions from different localities of the actual manipulations were surprisingly uniform. The healer is said to hook his forefinger or middle finger in the upper epigastric region underneath the xiphoid process. He then "elevates" the xiphoid process or tries to do so using gradually increasing finger pressure. The procedure lasts a few minutes. Several of the persons interviewed described that they had seen the village healer after their doctor's medicine had failed to alleviate their symptoms. The healer would make a diagnosis of "l-ghasfur il-qalb imdenel" ("sagging of the xiphoid process") before carrying out the procedure.

Another very similar procedure commonly practised by those village healers is "l-irfigħ tas-sorra" (literally "raising the sack"). This procedure is usually reserved for lower and more severe abdominal symptoms. The person carrying out the procedure slowly digs the tip of his fore or middle finger in the region of the umbilicus either directly or through a piece of cloth, with a side to side twisting movement. The finger is held vertically at right angles to the abdominal surface. It is then held there for some time. Considerable pressure is exerted. A 76 year old healer from Mellieħa had been taught the "art" by his mother. She had astutely observed that if the patient complained of pain im-

mediately after the finger was released, then the prognosis was often grave. She was obviously describing the phenomenon of rebound tenderness associated with peritoneal irritation or peritonitis.

It would seem probable that the custom of "terfa' s-sorra" was originally related to the manual reduction of an incarcerated or strangulated umbilical hernia and that the term "sorra" describes such a hernia. With the passage of time the procedure began to be practised on patients who had no obvious evidence of a hernia but who were nevertheless thought to have an "occult" one. As to the more common procedure of "l-irfiġh l-għasfur il-qalb", the background is more open to conjecture, and the reduction of a high epigastric hernia remains merely one possibility. The psychotherapeutic benefits of any deliberate manipulative ritual are all too obvious to the medical profession and must account for the great proportion of the numerous "cures" attributed to these healers.

The custom is most prevalent in the villages in the northwest part of Malta and is very popular in Mellieħa, the isolated village lying in the extreme northwest. This village formerly enjoyed a reputation in Malta and Gozo of possessing the best healers. The custom is however still widespread and is found as far apart as Siggiewi in the southwest and in the southeast region such as at the fishing village of Marsaxlokk. Further details

about the custom will not be described here as they are outside the scope of this article. This paper is intended to draw the attention of medical colleagues to the psychiatric, medical and even surgical aspects associated with the xiphoid process, whether because of the manipulative customs described above or through accidental self manipulation or palpation. The reader can easily find out for himself how quickly marked tenderness can be produced by palpation or pressure over the xiphoid process. Patients' belief in these folklore customs may lead to vitally crucial waste of time in such a condition as an incarcerated or strangulated hernia, where a few hours delay in operative management may make all the difference to the prognosis. On the other hand, symptoms arising from involvement of the xiphoid process may not be recognised as such. A wrong diagnosis may easily be made and a whole trail of unnecessary investigations may be embarked upon.

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#### References

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