
GENDER DIFFERENCE IN UPPER ABDOMINAL SONOGRAPHY

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ABSTRACT

Objective: To compare the sonography findings among male and female patients who came for chronic upper abdominal pain.

Methods: An ultrasound database of August/2000 was used for the purpose of this study. One hundred thirty nine patients with upper abdominal complaints were included (F81, M58, age range 25 days to 100 years).

Results: Among the females 42 were normal (53%), but among the males 22 were normal (35%). Fourteen women and 2 men had cholelithiasis, but hydronephrosis was found in 5 female and 5 male patients.

Conclusion: No significant gender difference was noted in upper abdominal sonographic findings except gallstone, which is more in women than in men.

Key words: Gender, upper abdomen, sonography.

INTRODUCTION

Chronic pain is defined by the International Association for the Study of Pain (IASP) as 'pain which has persisted beyond normal tissue healing time', usually taken to be three months.¹ Gender differences of pelvic structures are quite evident, but the upper abdominal organs are apparently similar, but may show subtle differences and variable disease patterns. Ultrasonography is a non-ionizing, non-invasive, safe and cheap imaging modality to evaluate various organs and therefore, we analyzed upper abdominal sonography to see gender-difference, if any.

METHODS

An ultrasound database of August/2000 was used for the purpose of this study. One hundred thirty nine patients with upper abdomi-

nal complaints were included (F81, M58, age range 25 days to 100 years). We used sector/linear transducer of Siemens sonoline real-time scanner (frequency 3.5 MHz).

RESULTS

Among the females 42 were normal (53%), but among the males 22 were normal (35%). Fourteen women and 2 men had cholelithiasis, but hydronephrosis was found in 5 female and 5 male patients.

DISCUSSION

Gureje et al. surveyed 5438 primary care attenders in 15 countries and found that 22% reported chronic pain, though this ranged from 5%

(Nigeria) to 33% (Chile), indicating the need to extrapolate figures from one population to another only with caution. The prevalence among primary care attenders in Manchester, England was 21%. There was a higher overall prevalence among women, but again this varied considerably between centres. In Manchester, for example, there was no significant sex difference.^{2,3} Elliott et al in a postal survey of a community sample of 5036 individuals in Scotland, estimated a population prevalence of 46% and found chronic pain to be associated with female sex, increasing age, inability to work and living in council rented accommodation.⁴ They found that the reported cause of chronic pain was much less important than these socioeconomic factors in determining its impact-16% of cases reported severe highly disabling pain and 28% had sought treatment and professional advice recently and frequently. A recent functional magnetic resonance imaging (fMRI) study by Joseph T. Lurito MD PhD & Michael Phillips MD of Indiana University School of Medicine (USA) revealed that, because of differences in brain activity between the sexes, men and women do, in fact, listen differently.⁵

Women can speak and listen simultaneously. This female multitasking ability results from a thicker corpus callosum (the bundle of nerve fibres connecting the left and right brain) with 30% more nerve connections.⁶ But the male brain has a clear advantage in spatial ability and navigation.⁷ Research has demonstrated that there are at least 4 specific areas in the right hemisphere of the male brain and several other areas in the left that are dedicated to spatial ability [e.g. three dimensional (3D) perspective, navigation, movement, and geography]. Von Korff and colleagues showed that individuals with chronic pain have

been shown to use the primary care services up to five times more frequently than the rest of the population with frequency of attendance related to persistence and severity of pain in the male sex.⁸ In our small series, more women complained of pain than men.

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