
EXPERT REVIEW

The relationship between fundic gland polyps and the presence of *helicobacter pylori* and the variation of this relationship according to age and sex

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gland polyps with *Helicobacter pylori*? How does this relationship vary with age and gender? Our study is intended to investigate this.

Keywords: Fundic gland; Polyp; *Helicobacter pylori*

ABSTRACT

Fundic gland polyps are known to be formed by hyperplastic proliferations caused by changes in the fundic (oxyntic) glands of the stomach. These polyps, which usually do not cause malignancy concern; The relationship with the use of PPIs has been suggested. What is the relationship of fundic

INTRODUCTION

Fundic Gland Polyps (FGP) are lesions that are increasingly detected and discussed all over the world and evaluated in many aspects such as PPI treatment and its relationship with *Helicobacter pylori*, association with dysplasia and neoplastic aspect. In studies involving all stomach polyps; It is reported that it can be detected in approximately 28% of large-case series [1].

The relationship between FGP and the presence of *Helicobacter pylori* has been very interesting and has attracted the attention of many researchers. What makes this situation interesting. Many studies have shown that the prevalence of *Helicobacter* is very low in cases with FGP. However, this situation; it does not apply to other stomach polyps (for example: hyperplastic polyps). It is more commonly detected in the presence of *Helicobacter pylori* [2-4].

Since it is included in the predisposing factors for gastric diplasia and malignancies. This *Helicobacter pylori* association (negative association) with FGP and its meaning may be important.

LITERATURE REVIEW

In this context, in our study, we investigated the association of FGP and *Helicobacter pylori* and how this varies with age and sex. Our cases;

of the 2200 upper gastrointestinal endoscopic biopsies performed in our hospital between 2021 and 2023, 300 of them were found to have fundic gland polyps. Accordingly; the detection rate of fundic gland polyp in our endoscopies was determined as approximately 1%-3.5%.

Become 222 of our Gus are women, 78 one of them consists of male patients. The rate of female patients in cases with FGP is 74%. This rate remains at 26% for our male patients. In women; the detection of FGP at a higher rate than in men was consistent with previous studies on this subject [5].

The youngest age of FGP in women was 21, the oldest age was 84 years, the youngest age was 3 8 years in men, and the oldest age was 81 years. These results are also based on the age factor; it seems to be close to the 10-90 age group range found in a study that does not take gender into account [6].

Table 1 and Figure 1 show the distribution of our patients with FGP according to age and gender.

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TABLE 1
Distribution of fundic gland polyps and HP positivity by age and gender

AGE	MAN	WOMAN
20-30	-	2
32-40	-	2
41-50	-	8
51-60	4	20
61-70	12	16
71-80	8	10
Over 80 years old	-	2

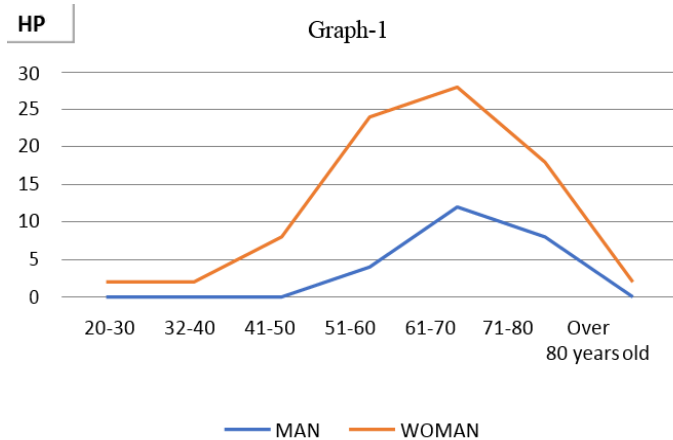


Figure 1) Graph of association with HP in patients with fundic gland polyps

Accordingly; in 84 of the 300 cases in which we detected the presence of FGP, we also detected the presence of *Helicobacter pylori*. So, in our study, the association between FGP and *Helicobacter pylori* was determined as 28%. This rate is slightly higher than those found in similar studies. Sharif Elhanefi and friends; In their study on was 10% found [7].

However; in this study with more cases, the presence of FGP was found to be approximately 2 times (28%) than the rate of 13% in our study. In another study involving 101 FGP polyps, association with *Helicobacter pylori* was reported as only 2%. 7090 upper GIS endoscopic biopsy, they determined that the association of *Helicobacter pylori* in 82 FGP [8].

These differences can be attributed to many factors. Some of these factors are; Drugs used for ulcer and gastritis treatments (PPI, antacid, etc.), dietary habits that vary from country to country, geographical factors, living conditions and habits of patients (smoking, alcohol use) may be factors.

As observed in Table-1 and Figure 1, regardless of the sex difference, the co-presence of FGP and *Helicobacter pylori* is quite low in the younger age group. While *Helicobacter pylori* association was never encountered in the presence of FGP in the 20-50 age group, only 12 cases in women met this condition. Likewise, the presence of

Helicobacter pylori is not observed in any of the cases with male FGP over 80 years of age, while this number is only 2 in women of the same age group.

When all our FGP cases are taken into consideration; in 84 cases, the presence of *Helicobacter pylori* was approximately 3 times higher in women than in men (24 male versus 60 female cases).

In both men and women between the ages of 50-80; the highest FGP and *Helicobacter pylori* are co-existent.

Let's say by pressing on this study; it is not intended to reveal once again the inverse relationship between the presence of *Helicobacter pylori* and the presence of FGP, which has been done many times before.

Because the result of these studies is obvious. Goal is to reveal the distribution of the current relationship according to gender and age range. Histopathological from some of our case examples in figures 2- 5 are also included.

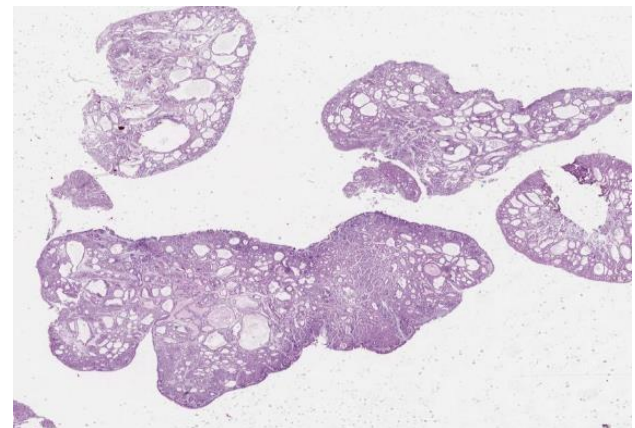


Figure 2) Fundic gland polyps: H&E ×5(digital pathology)

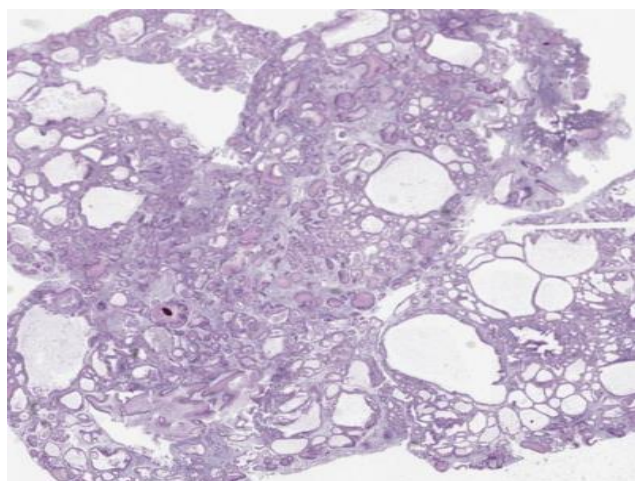


Figure 3) Fundic gland polyp :H&E×10 (digital pathology)

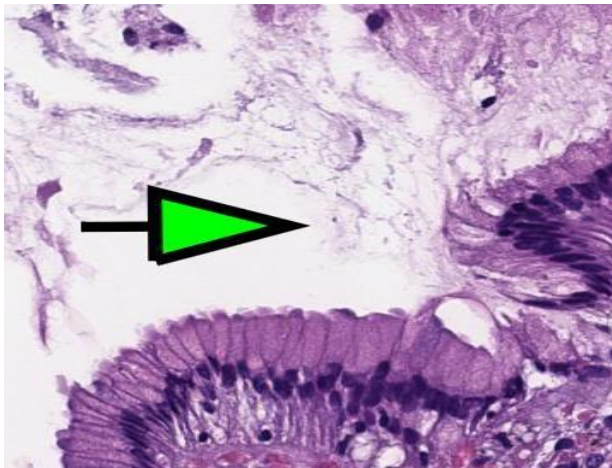


Figure 4) Association of fundic gland polyp and *Helicobacter pylori*: H&E X20 (digital pathology)

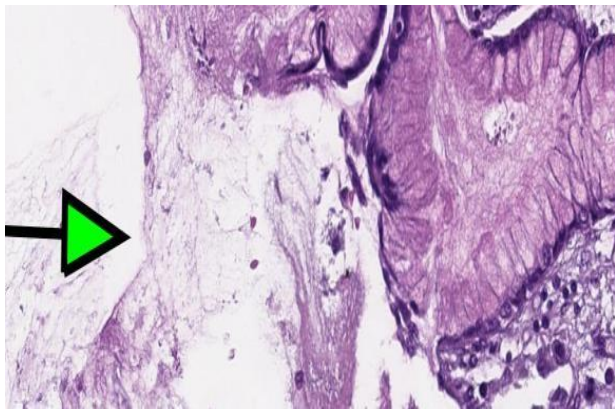


Figure 5) Fundic gland polyp and *Helicobacter pylori* together: H&Ex40

DISCUSSION

Fundic gland polyps

Today, it is defined as the most commonly observed gastric polyps. Polyps that we frequently observe in this current practice. Indeed, it has been repeatedly demonstrated by many studies, some of them on a large scale, that it prefers stomachs with less *Helicobacter pylori* [9].

However; in most of these studies, age and sex interpretations with *Helicobacter pylori* and FGP have been reported superficially. Most of these studies; it is particularly focused on the result of an increased likelihood of developing FGP polyps in stomachs treated with PPIs (proton pump inhibitors), especially with prolonged use [7, 10-12].

Even; there are even ambitious results, such as regression of FGPs when there is *H.Pylori* infection in the cells and expansion of FGPs remaining after *H.Pylori* eradication [13]. On the other hand; It is stated that some caustic factors affecting the gastric mucosa may also contribute to the formation of FGP [14]. Pesticides, caustic foods, medicines and industrial cleaning agents (due to improper intake or suicidal use) can also cause FGP formation [15].

In addition; the effects of alcohol, smoking and dietary changes on the development of gastric polyps have also been investigated by some researchers, but no relationship has been observed. However, these studies are far from credible since they are usually conducted on a small number of patients [16].

CONCLUSION

In fact, the age and gender distribution may offer important clues. In women and men, between the ages of 50-80; Why is the association of *Helicobacter pylori* and FGP increasing? And again, why is the proportion of women in this age group 2 times that of men? Doesn't this require serious investigation into hormonal factors? So there is still a long way to go, a lot of research to be done.

COMPLIANCE WITH ETHICAL STANDARDS

Appropriate.

FUNDING

No.

CONFLICT OF INTEREST

No.

CONTRIBUTIONS

There are no contributors other than me.

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