

Gastric dysplasias. A clinicopathological study of 35 cases

Alena Chlumská^{1,2}, Petr Mukenšabl¹, Tomáš Waloschek², Michal Zámečník³

¹ Šikl's Department of Pathology, Medical Faculty Hospital, Charles University, Pilsen, Czech Republic

² Laboratory of Surgical Pathology, Pilsen, Czech Republic

³ Medicyt s. r. o., Department of Pathology, Trenčín, Slovak Republic

SUMMARY

Gastric epithelial dysplasia (GED) represents a recognized precursor lesion of gastric adenocarcinoma. GED types can be classified according to its morphology and patterns of mucin expression into adenomatous (intestinal), foveolar (gastric) and hybrid (mixed) types. We examined gastroscopic specimens with GED in 35 patients (21 men and 14 women, mean age 69.6 years). Adenomatous dysplasia was present in 17 patients (49 %), and was of low grade in 14 cases and high grade in 3 cases. Foveolar type dysplasia was found in 16 patients (46 %), and almost in one half of the cases it was high grade (in 7 cases, i.e. 46 %). In one woman, low grade foveolar dysplasia was found in polypoid mucosal prolapse of the gastric antrum. Hybrid dysplasia was found in only 2 cases (0.6 %), and in both of them this dysplasia was predominantly of foveolar type. One case was of low-grade and the second case was of a high-grade type. In our series GED was found mostly in the antrum. The findings in the adjacent mucosa usually included HP negative inactive chronic gastritis with intestinal metaplasia of both complete and incomplete types. In our series, foveolar type dysplasia was more frequent in comparison with previous studies. Our findings show that high grade dysplasia is more frequent in foveolar GD than in adenomatous GD, and this is in keeping with previous published findings.

Keywords: stomach – dysplasia – immunohistochemistry – low and high grade lesions – intestinal metaplasia

Dysplázie sliznice žaludku. Klinickopatologická studie 35 případů

SOUHRN

Dysplázie žaludeční sliznice je všeobecně uznávaným prekurzorem adenokarcinomu žaludku. Podle typu produkovaných hlenů a buněčné diferenciaci se v poslední době rozlišují tři základní typy dysplastických změn: adenomatózní (intestinální), foveolární (gastrický) a hybridní (smíšený). Naši sestavu tvoří 35 nemocných (21 mužů a 14 žen, prům. věk 69,9 let) s biopticky ověřenou dysplázií žaludeční sliznice. Adenomatózní dysplázie se vyskytovala u 17 nemocných (49 %) a většinou odpovídala low grade lézi (n = 14). Foveolární typ byl prokázán u 16 nemocných (46 %); téměř v polovině případů se jednalo o high grade dysplázii (n = 7). U jedné nemocné se low grade foveolární dysplázie nacházela v polypózním prolapsu antrální sliznice žaludku. Hybridní dysplázie byla prokázána pouze u dvou případů (0,6 %), v jednom případě low-grade a v druhém high-grade typu. Dysplastické změny byly převážně lokalizované v antrální části žaludku. V okolní sliznici odpovídal nálezu u většiny nemocných *Helicobacter pylori* negativní chronické neaktivní gastritidě s kompletní nebo nekompletní intestinální metaplazií. Nálezy v naší sestavě nemocných prokázaly vyšší výskyt foveolární dysplázie, než se všeobecně uvádí. Ve shodě s předchozími studiemi měla foveolární dysplázie častěji charakter high-grade léze.

Klíčová slova: žaludek – dysplázie – imunohistochemie – low-grade – high-grade

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Gastric epithelial dysplasia (GED) has been widely recognized as a precursor lesion for gastric adenocarcinoma. In the gastrointestinal tract, the dysplasia is synonymous with intraepithelial neoplasia, and implies architectural and cytological changes. GED frequently develops in the setting of chronic atrophic gastritis and intestinal metaplasia (1–5), although it may also occur in apparently normal gastric mucosa (1,6,7). Endoscopically, it can show polypoid, flat or slightly depressed growth patterns. Despite similar microscopic morphology found in all of these lesions, the polypoid

or protruding lesions are commonly referred to as adenomas whereas the term dysplasia is used for flat or depressed types (5,7,8–11).

Recently, advances in mucin immunohistochemistry have led to efforts to classify GED according to their patterns of mucin expression. The majority of GED displays an intestinal phenotype, and they were labeled as **adenomatous (intestinal) type** that resembles colonic adenoma. Other variants include foveolar (gastric) type and hybrid (mixed) type (2,6–10,12); however, the hybrid (mixed) type dysplasia represents a less commonly used term. Adenomatous GED is composed of crowded, tubular glands lined by columnar cells with pseudo-stratified, pencil-shaped hyperchromatic nuclei, and it expresses intestinal markers (CD10, MUC2), whereas gastric mucins (MUC5AC, MUC6) are negative. **Foveolar variant** shows cuboidal to columnar cells with pale-clear cytoplasm and hyperchromatic nuclei, and it predominantly produces MUC5AC. It is frequently of a high grade. The third type, **hybrid dysplasia**, is defined as a mixture of both adenomatous and foveolar dysplasia. Foveolar type morphology predominates usually in hybrid dysplasia (10). The second component in hybrid dysplasia should occupy at least 10 %

✉ Correspondence address:

Alena Chlumská, MD, CSc
Bioptická lab.
Mikulasske nam. 4
32600 Pilsen, Czech Republic
e-mail: chlumska@medima.cz
phone: +420-737-220-403