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HISTOPATHOLOGICAL RESEARCH AND DIAGNOSIS OF IMPORTANT PAINTING METHODS

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ABSTRACT

Both diseases can safely in experimental research need to the histopathological diagnosis many coloring method utilized. This application of Immunohistochemistry and İmmunfloresan coloring methods stands out in terms of definitive diagnosis. Our country and other countries in which research scientists or Diagnostics these methods and which use antibodies to investigate the research planned and many Assembly-style research. İmmunfloresan coloring method, especially of some diseases affecting the immune system, resulting in the tissues of immunoglobulin and complement in the display of the Immunohistochemical staining method used to diagnose cancerous tissues. Both the painting cut early diagnosis of cancer in particular methods for specific investigations and used as safe.

***Key Words**: Immunohistochemistry, Immunoflourescence, Histology, Pathology, Histopathology*

1. INTRODUCTION

In the case of experimental investigations, histopathologic changes in the cells are revealed by using immunohistochemistry and immunofluorescence staining methods by making use of many different staining kits. Immunohistochemical staining is a differential diagnosis method that takes advantage of immunology based on identification and demonstration of building blocks or chemical reactions in cells with enzymes marked with a special color. Identifies the type of tumor, the tissue from which it is obtained, the normal or extraordinary products it produces, and thus determines the tumor type or whether the drugs used in the tumor-specific treatment can be applied. Immunofluorescence staining etiology is based on the principle of recognizing certain skin, kidney, vascular diseases with immunologically mediated mechanisms, revealing the stored immunocomplexes with fluorescence marked dyes and evaluating the existing fluorescence with dark field specific light filters.

In our study, it was aimed to reveal the importance of dyeing methods and dyeing kits in the field of histopathology with the literature information.

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2. METHOD

Dyeing kits and dyeing methods, which have an important role in revealing the histopathological changes in cells and tissues, have been investigated by using the literature information.

3. RESULTS

In the literature survey, many immunohistochemical and immunofluorescent staining methods have been used to reveal histopathologic changes in tissues and cells.

Elagoz et al. (2006) reported that an immunohistochemical panel consisting of CD117, CD34, actin, desmin should be applied to distinguish the other mesenchymal tumors from gastric intestinal stromal tumors of mesenchymal tumors.

Du et al. (2008) showed that CD44 was a robust marker for the diagnosis of colorectal cancer.

Niflioğlu and Nebe (2014) used Immunoglobulin G antibody and Complex 3 (C3) antibodies by Direct Immunofluorescence to detect Immunoglobulin G and Complex 3 accumulation in subcutaneous basement membrane in Gestational pemphigoid (GP) disease with autoimmune subepidermal bullous dermatosis.

Ma et al. (2013) identified IgG and C3 localization on the basal membrane epinephrine side using IgG and C3 antibodies by immunofluorescence method in the diagnosis of membranous glomerulonephritis, the most common cause of nephrotic syndrome in adults.

Ozsan et al. (2013) evaluated estrogen receptor and progesterone receptor immunoreactivity and percentages of P53, c-erb B2, and Ki67 immunoreactivity staining to assess receptor status in breast cancer, the most common malignancy in women at the beginning of cancer-related death causes in women today.

Liu et al. (2016) used CK5 / 6, CK14, E-cad, CD24, CD44, CLDN3, CLDN4, CLDN7, Vimentin, AR and EGFR antibodies to differentiate subtypes of breast cancers.

Coskuner et al. (2000) investigated PSA immunoreactivity in prostate cancer. Investigators have shown that immunohistochemical staining of prostate tissue with PSA reveals the prostatic origin of the tissue with a few exceptions, especially with poorly differentiated tumors spreading to the prostate and bladder; Stated that the presentation of prostatic origin in metastatic cancers is valid for the detection of large pelvic masses that go through multiple organ involvement.

Prasad (2005) stated that immunohistochemical staining of thyroid nodules is supportive in the diagnosis of thyroid tumors, using Galectin-3, Fibronectin-1, Cited-1, Hbme1 and Cytokeratin-19 immunohistochemical staining kits to increase the correct diagnosis rate.

Demirhan et al. (2011) positively detected cytokeratin, vimentin, CD34 immunoreactivity by immunohistochemical staining of the pleura's solitary fibrous tumor and emphasized its importance in terms of differential diagnosis.

Turk et al. (2014) reported that the differential or differential diagnosis of angiomyomas from multiple reactive and neoplastic diseases, which may exhibit myxoid

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degeneration, is very important, and that the positivity or negativity of vimentin, S100, desmin and smooth muscle actin immunoreactivity is the most important.

Diagnosis of Kaposi's sarcoma, which is a type of tumor caused by Adisa et al. (2013), Human herpes virus 8 (HHV8) or Kaposi's sarcoma-associated herpes virus (KSHV), and after widespread appearance in AIDS patients in the 1980s, Vimentin and smooth Muscle actin (SMA) antibodies are the most reactive.

Tyagi et al. (2002) reported that Bcl2 expression in central nervous system tumors increased 2-6 fold compared to normal tissue.

Muratlı et al. (2013) investigated the iNOS immunoreactivity in the gastric mucosa by giving mussels to the rats and found that the mussel-fed rats removed from the heavy metal-containing regions were iNOS-positive staining in the gastric mucosa. Gezen et al. (2013) investigated iNOS immunoreactivity in ovaries of mussel-fed rats and found iNOS positive staining in ovaries of mussel-fed rats extracted from heavy metal-containing regions.

4. DISCUSSION

When literature information is evaluated, Liu et al. (2016), CK5 / 6, CK14, E-cad, CD24, CD44, CLDN3, CLDN4, CLDN7, Vimentin, AR and EGFR antibodies. (2013) estrogen receptor and progesterone receptor, P53, c-erb B2 and Ki67 antibodies, Hammond et al. (2010) used estrogen receptor and progesterone receptor.

Du et al. (2008) used CD44 antibody in colorectal cancer, Akagi et al. (2000) reported that the Vascular endothelial growth factor-C antibody in the regional lymph nodes with the colon, Szajewski et al. (2015) used the VEGF-C antibody. George et al. (2001) evaluated the association of the angiogenic cytokines VEGF-A, VEGF-C and VEGF-D receptors VEGFR-2 and VEGFR-3 in metastatic spread of colorectal cancer (CRC).

Muratlı et al. (2013) and Gezen et al (2013) investigated iNOS immunoreactivity in rat stomach and liver by immunohistochemical staining method.

5. RESULTS

Immunohistochemistry and immunofluorescence staining methods have been used frequently with specific antibody kits to determine histopathologic changes in tissues and cells.

6. RECOMMENDATIONS

It is thought that immunohistochemical and immunofluorescent staining methods should be used with appropriate antibody kits in case of academic studies and histopathologic changes in cells and tissues which are important data in disease diagnosis are determined.

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