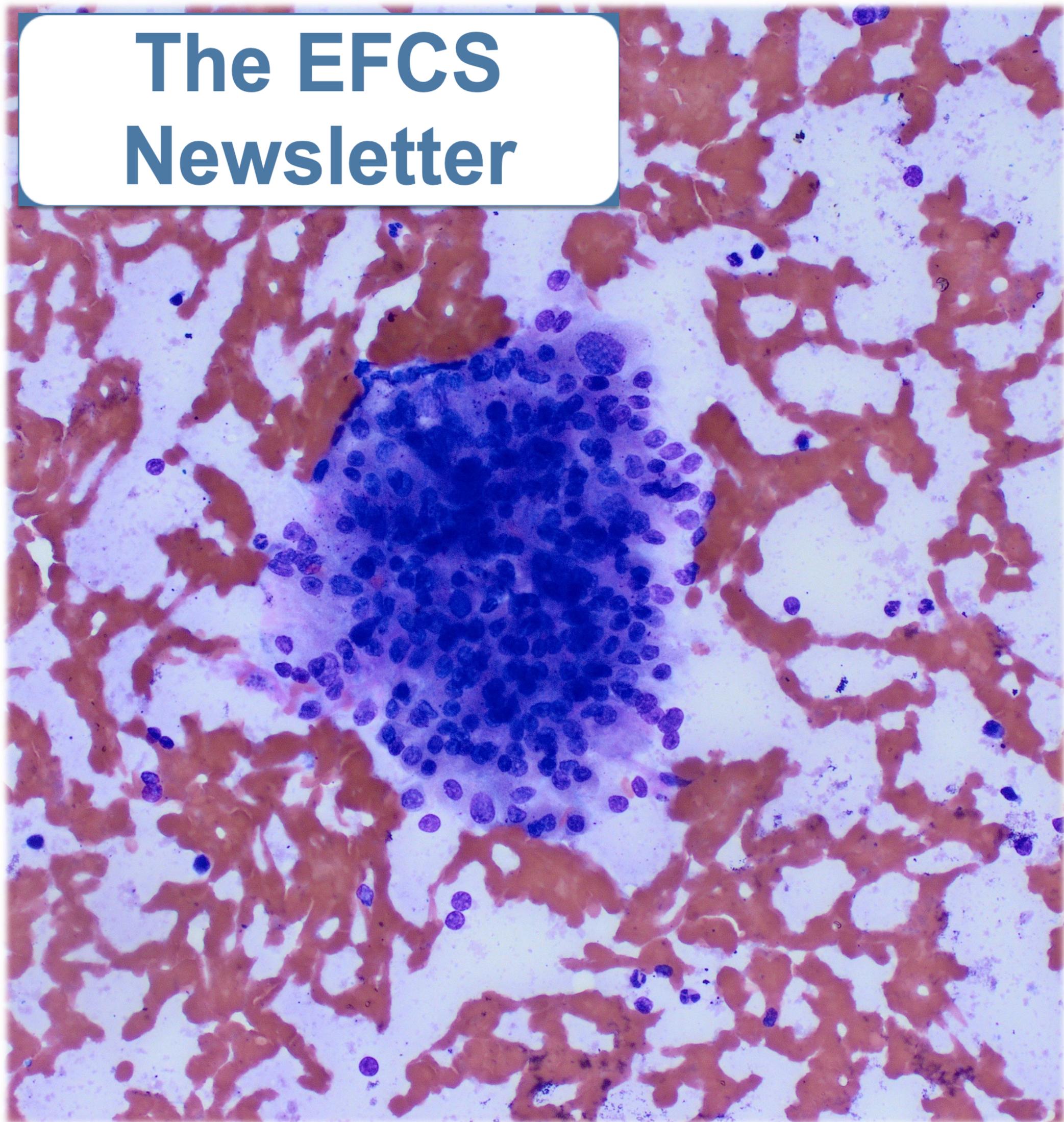




EFCS
European Federation of
Cytology Societies

The EFCS Newsletter



Issue 3/2022



EFCS NEWSLETTER

ISSUE 3/2022



EFCS
European Federation of
Cytology Societies

Dear Friends and Colleagues,

In October we experienced a major change in the EFCS Board of Directors. Prof. Jerzy Klijanienko has finished his mission as an EFCS President and this position has been entrusted to Dr László Vass. Prof. Klijanienko was the EFCS President for three years due to the COVID pandemic and in this time managed to organize one of the first hybrid medical congresses – the 43rd European Congress of Cytology in Wrocław, turned out to be a great success. Dr Vass is the president of the 44th European Congress of Cytology in Budapest in 2023 and I am sure that this will be a big and ambitious event.

Although this issue is not the biggest, I believe the content is of the best quality! Thanks to prof. Fernando Schmitt and dr Andrew Field you can be familiarized with the ideas of new WHO books concerning reporting systems in cytopathology. Dr Ivana Kholová presents EFCS Scientific Committee research activities – fascinating and important as always. And finally, you can test yourself in our Case Challenges!; this time presented by dr Damjana Cimerman together with dr Marianne Engels.

This year's summer was a busy moment for cytological education. European Congress of Pathology, with rich cytological content, has just finished in Basel and cytopathologists were well represented there. Numerous national meetings also took place, like the British Association for Cytopathology Annual Scientific Meeting, Finnish Society for Clinical Cytology meeting, Congress of Polish Society of Pathologists with one of the sessions led by Cytology Section and the meeting in Slovenia on the occasion of the 70th anniversary of the Department of Cytopathology in the Institute of Oncology. All the best to our Slovenian friends! Recently, there was another occasion for celebration - the Spanish Society of Cytology was celebrating its 60th anniversary. All the best to Spanish cytopathologists as well!

And soon we will meet each other at International Congress of Cytology in Baltimore. Do not forget to come to our EFCS sessions:

- “Interventional Meets Molecular Cytology”, 16 NOV 22, 4:00pm - 6:00pm
- “Updating The Bethesda System for Reporting Thyroid Cytopathology”, 17 NOV 22, 8:00am - 10:00am
- “Practical Aspects of Cytopathology Diagnostics”, 17 NOV 22, 3:30pm - 5:00pm
- “How in the World Do We Teach Cytopathology”, 19 NOV 22, 8:00am - 10:00am
- “The Present and Future of Cytology - Point of View of Young Cytopathologists”, 20 NOV 22, 8:00am - 9:30am.

Enjoy reading and see you in Baltimore!

Pawel Gajdzis
Residents and YEFCS Committee



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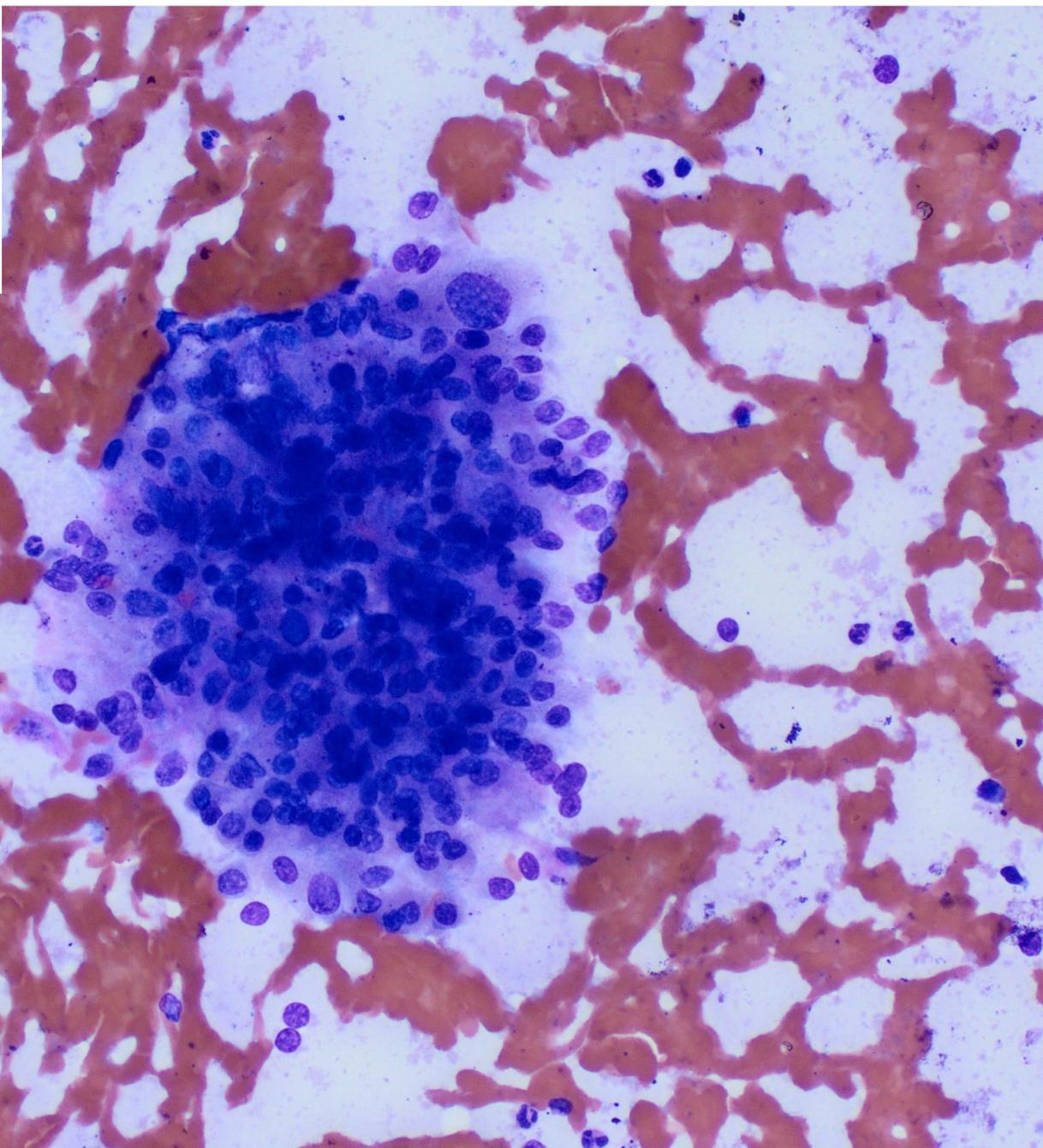
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Cover photo:
Hepatocellular carcinoma
(MGG)

Letter from the Past President of EFCS

October 1, 2022, I end my mission as the President of the European Federation of Cytology Societies. This position has been entrusted to Dr. László Vass from Budapest in Hungary who will organize 44th ECC.

By a pure hazard of the calendar and the health situation related to the COVID pandemic, the post of president lasted 3 years instead of the usual 1 year.

It was entrusted to me June 16, 2019, at the end of 42nd ECC in Malmö. My mission was to organize 43rd European Congress of Cytology (ECC) in Wrocław in Poland in 2020.



*Prof. Jerzy Klijanienko
43rd European Congress of Cytology*

Polish Society of Pathologists became an official organizer. Professors Michał Jeleń, Andrzej Marszałek and dr Paweł Gajdzis became vice-presidents. Wrocław Congress Center with Ms Wiktoria Król-Cieciorowska, was in charge of technical affairs.

But unthinkable happened!

At the end of 2019, the health situation became dramatic due to the Covid 19 pandemic. First, in China and then, quickly, in Italy and Spain. A weakness in the equipment of masks, paracetamol, organization to fight against the epidemic have emerged everywhere. The governments of all countries have restricted travels which have been a terrible blow to us, the organizers of the 43rd ECC. Due to the lack of organization and clear decisions, it was impossible to predict how we can organize a future meeting on this scale. Who and from where will come? Commonly communicate remotely, how to find additional funding?

At the beginning of 2020, the decision was made: we will postpone 43rd ECC for 2021. Hoping for better and friendlier times for scientific and social life.

This on the condition of redefining our scientific project, new reservations for hotels, the congress center.... etc etc. A big point of discussion was the choice of formula. Should we hold the congress face-to-face, maybe only virtual or even mixed: face-to-face and virtual? Our finances, until the end, were not assured. Usual sponsors, were not very active in this uncertain situation, the choice of a mixed congress, was the most expensive. Hence this questionable decision, EFCS decided that we should require the registration fees for the chairs. Fortunately, the 43rd ECC was finally generously supported by the Mayor of the city of Wrocław, Mr. Jacek Sutryk, as well as the Minister of Education and Science, Professor Przemysław Czarnek.

(continues on the next page)



Letter from the Past President of EFCS

The 43rd ECC included an impressive 132 different scientific sessions, consisting of 5 keynote lectures, 21 companion meetings, 29 symposiums, 29 workshops, 12 slide seminars, 3 open papers sessions, and 1 International Academy of Cytology examination. There were over 600 participants from 51 countries and 5 continents, reflecting the truly worldwide participation of the cytology community. The Congress delegates included 76 session chairs as well as 213 on-site participants and 345 who participated virtually in the meeting. Approximately 90% of the Congress participants were from Europe.

Keynote speakers at the 43rd ECC were: Dr. Gaëlle Pierron (Institut Curie, Paris, France), with the lecture “Genomic Markers in Sarcomas in Daily Practice—From Molecular Diagnosis to Therapeutic Target”; Professor Catherine Cuschieri (Royal Infirmary of Edinburgh, Edinburgh, UK), with the lecture “HPV Primary Screening Pathways; Negotiating the International Landscape”; Professor Richard J. Cote (Washington University, St Louis, Missouri), who presented “Circulating Tumor Cell Capture, Interrogation, Imaging, Automated Analysis, and Culture: New Tools and Biologic Insights”; Professor Adel K. El-Naggar (The University of Texas MD Anderson Cancer Center, Houston, Texas), discussing “Diagnosis and Genomics of Salivary Gland Neoplasms: MD Anderson Perspectives”; and Professor William C. Faquin (Harvard Medical School and Massachusetts General Hospital, Boston, Massachusetts), presenting “Advances in the Diagnosis and Treatment of Adenoid Cystic Carcinoma and Other Salivary Gland Cancers.”

The companion meetings were organized by China, Croatia and Greece, the Czech Republic and Slovakia, the European Advisory Committee of Cytotechnology, Euro-Asia, France, Germany, India, Italy, Japan, Lower Silesia, Poland, Portugal, Russia, Slovenia, Sweden, Taiwan, Turkey, the United Kingdom, and the United States (American Society of Cytopathology). Approximately 430 attendees participated either on-site or online in 29 different workshop (1).

The 43rd ECC was also the place of change for the position of the general secretary of EFCS. Prof Danijela Vrdoljak-Mozetič was chosen and replaced Dr Beatrix Cochand-Priollet.

The post-conference period was eventful. The structure of EFCS has been redefined. New research and educational projects have been initiated. Some of them are planned to be presented at the USCAP 2023.

2022 is the year of International Congress of Cytology (ICC) which is organized by International Academy of Cytology (IAC), this time combined with American Society of Cytopathology Annual Meeting. EFCS scientific contributions will be presented during IAC/ASC in Baltimore 2022 within the sessions entitled “Interventional Meets Molecular Cytology“, “Updating The Bethesda System for Reporting Thyroid Cytopathology », “How in the World Do We Teach Cytopathology, » Practical Aspects of Cytopathology Diagnostics“ and “ The Present and Future of Cytology - Point of View of Young Cytopathologists“.

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Letter from the Past President of EFCS



13th EFCS annual Tutorial of Cytology in Trieste

After the experience with the virtual Tutorial 2021, the 13th EFCS annual Tutorial of Cytology was held in Trieste, Italy, June 13-17, 2022. Eleven topics were discussed including urine, breast, thyroid, pancreatic, serous effusions, salivary gland, lymph node and gynecological cytology. Lectures on ROSE, molecular and digital cytology as well as HPV were also included.

In the QUATE exam in Trieste, 15 new candidates attended the exam.

Moreover, EFCS and Société Française de Cytologie Clinique are preparing 14th Annual Cytology Tutorial in Toulouse in June 2023.

Finally, recently new member e.i. Ukraine joined EFCS and Serbia reactivated. Thank you Danijela for that.

I allow myself here, to thank EFCS for the confidence that I had, to entrust me with this respectable position.

I would also like to thank the entire organizing team of 43rd ECC in Wrocław.

I present my sincere wishes to Dr. László Vass hoping that the 44th ECC will be the most ambitious in the history of cytology.

Jerzy Klijanienko MD, PhD, MIAC
Institut Curie, Paris, France
Past President of EFCS, 2019-2022

- (1) Klijanienko J, Cochand-Priollet B, Król-Cieciorowska W, Jeleń M, Vrdoljak-Mozetič D. Organization of the 43rd European Congress of Cytology in the SARS-CoV-2 pandemic period: A report. *Cancer Cytopathol.* 2022 Jul;130(7):488-490. doi: 10.1002/cncy.22578. Epub 2022 Apr 13.

WHO Reporting Systems for Lung, Pancreaticobiliary, Lymph Node and Soft Tissue Cytopathology

International Agency for Research on Cancer



World Health
Organization



The International Academy of Cytology (IAC) in 2020 joined with the International Agency for Research on Cancer (IARC), an agency of the World Health Organization, in developing and publishing four international systems for reporting lung, pancreaticobiliary, lymph node and soft tissue cytopathology. There have been a number of successful cytopathology reporting systems for various body sites previously developed by groups of cytopathologists and endorsed by cytopathology societies, and published and used over the last three decades, and a number of these are currently undergoing review for new editions.

The advantages of creating a joint project with the IARC are that the IARC is an established experienced publisher of the WHO Tumour Classification (the 'Blue Books') series including the 5th Edition, with a successful system for selecting editors and authors using bibliometric analyses and assessments of commitment and geographical location. IARC has an excellent web based system for authors and editors to generate the textbooks, and can provide a system that could establish a common approach to all these new reporting systems and their first edition books.

The process of the selection of editors and authors, writing and review of the literature, have been similar to those used for the WHO Classification of Tumours. In fact, one of the goals of the Reporting Systems are to provide cytopathological correlates with the entities described in the WHO Classification of Tumours, thereby presenting an international approach for reporting cytopathology that mirrors and supplements the WHO Classification of Tumours, with links on the IARC website between the two series. In addition, information obtained by international surveys on each System were developed by the IAC and the Expert Editorial Boards, and promoted by the IAC to the broad cytopathology community with collated results analyzed and informing the Boards.

(continues on the next page)



WHO Reporting Systems for Lung, Pancreaticobiliary, Lymph Node and Soft Tissue Cytopathology

The aims of this joint project are to improve the quality of cytopathology reporting in the four systems by establishing for the first time an international consensus on the key diagnostic cytopathological criteria of specific lesions, and standardizing the actual reporting of cytopathology. This will assist communication between cytopathologists and clinicians and ultimately improve patient care. The process of developing the systems and bringing expert cytopathologists together to discuss the existing evidence will not only lead to an international consensus but will highlight areas that need further study. One of the outcomes of any published and widely used reporting system, is that attention and research focusing and critiquing the system follows the publication leading to improvement in cytopathology reporting.

The WHO Systems have been developed so that they can be used internationally in all medical infrastructure settings and provide options for diagnostic management that recognize that ancillary diagnostic and prognostic testing are not generally available in low- and middle-income countries. The WHO Systems detail the cytopathological diagnosis and any differential diagnosis with options for further diagnostic management of the patient.

Each of the WHO Reporting Systems emphasizes the importance and provides detailed information on the management of cytopathology material, cell preparation techniques and the application of ancillary testing, including immunocytochemistry and molecular pathology.

The online WHO Reporting Systems will provide a direct link to the WHO Tumour Classification 5th Edition. This will raise the profile and use of cytopathology by increasing awareness of its current role and its potential role in the era of personalized medicine based on molecular pathology utilizing 'small biopsies'. Ultimately, the Systems will improve patient care and outcomes. Further developments include new reporting systems for breast, liver, kidney and head and neck, and the development of minimum data sets of core and noncore cytopathology report components by a joint project of the IAC and the International Collaboration of Cancer Reporting.

Andrew Field, MD, FIAC
President of the International Academy of Cytology
Member of Standing Committee WHO Cytopathology Reporting Systems

Fernando Schmitt, MD, PhD, FIAC
General-Secretary and President-Elect of the International Academy of Cytology
Member of Standing Committee WHO Cytopathology Reporting Systems

EFCS Scientific Committee Is Busy with Various Projects

Our “ASC-US” study was published in *Cancer Cytopathology* as Open Access <https://acsjournals.onlinelibrary.wiley.com/doi/epdf/10.1002/cncy.22624>: mild squamous cell atypia, HPV bias and digital cytopathology evaluated by 15 European expert cytopathologists in one package. The story continues: as we have now scanned 71 ThinPrep cases with follow-up and HPV status, more studies will follow.

Original Article

Inter- and intraobserver agreement in whole-slide digital ThinPrep samples of low-grade squamous lesions of the cervix uteri with known high-risk HPV status: A multicentric international study

Ivana Kholová, MD, PhD, MIAC ^{1,2}; Giovanni Negri, MD ³; Maria Nasioutziki, MD, PhD, MIAC⁴; Laura Ventura, PhD⁵; Arrigo Capitanio, MD⁶; Massimo Bongiovanni, MD, FIAC ⁷; Paul A. Cross, MD⁸; Claire Bourgain, MD, PhD, MIAC⁹; Henrik Edvardsson, MD, PhD¹⁰; Rosario Granados, MD, PhD, FIAC ¹¹; Artur Lipiński, MD, PhD¹²; Ellen Christina Obermann, MD¹³; Maurizio Pinamonti, MD¹⁴; Henrieta Sidlova, MD, PhD¹⁵; Margareta Strojan Fležar, MD, PhD, MIAC¹⁶; Folkert J. van Kemenade, MD, PhD¹⁷; Danijela Vrdoljak-Mozetic, MD, PhD, MIAC¹⁸; Ambrogio Fassina, MD, PhD ¹⁹; and Beatrix Cochand-Priollet, MD, PhD, MIAC²⁰

BACKGROUND: High-risk human papilloma virus (HR HPV) testing and liquid-based cytology are used for primary cervical screening. Digital cytology, based on whole-slide scanned samples, is a promising technique for teaching and diagnostic purposes. The aim of our study was to evaluate the interobserver and intraobserver variation in low-grade squamous lesions, HR HPV status bias, and the use of whole-slide scanned digital cervical cytology slides. **METHODS:** Fifteen expert cytopathologists evaluated 71 digitalized ThinPrep slides (31 atypical squamous cells of undetermined significance [ASC-US], 21 negative for intraepithelial lesion or malignancy, and 19 low-grade squamous intraepithelial lesion cases). HR HPV data were accessible only in the second round. **RESULTS:** In interobserver analysis, Kendall's coefficient of concordance was 0.52 in the first round and 0.58 in the second round. Fleiss' kappa values were 0.29 in the first round and 0.31 in the second round. In the ASC-US category, Fleiss kappa increased from 0.19 to 0.22 in the second round and the increase was even higher expressed by Kendall's coefficient: from 0.42 to 0.52. In intraobserver analysis, personal scores were higher in the second round. **CONCLUSIONS:** The interobserver and intraobserver variability in low-grade squamous lesions was within fair agreement values in the present study, in line with previous works. The comparison of two rounds showed that expert cytopathologists are generally unbiased by the knowledge of HR HPV data, but that being informed of the HR HPV status leads to a better agreement. Stain quality and back discomfort were highlighted as factors affecting digital cytopathology use. *Cancer Cytopathol* 2022;0:1-10. © 2022 The Authors. *Cancer Cytopathology* published by Wiley Periodicals LLC on behalf of American Cancer Society. This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

KEY WORDS: ASC-US; cervical cancer; digital cytopathology; HPV; interobserver agreement; intraobserver agreement.



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EFCS Scientific Committee Is Busy with Various Projects

During European Congress of Cytology in Wroclaw, 8 experts consequently evaluated 20 ThinPrep cases in microscopy. The correlation results between digital and microscopy diagnoses will be presented as Platform Presentation at 21st International Congress of Cytology and the 70th Annual Scientific Meeting of the American Society of Cytopathology in November in Baltimore. The session is on Friday 18th November at 4 pm local time.

All EFCS Scientific Committee Projects will be presented at short course session on Thursday 17th November at 3.30 pm local time at 21st International Congress of Cytology and the 70th Annual Scientific Meeting of the American Society of Cytopathology. In this session gynecological cytology, terminology and cell blocks and immunocytochemistry projects will be summarized with me and Massimo Bongiovanni as chairs and following speakers: Beatrix Cochand-Priollet, Irena Srebotnik Kirbiš, Massimo Bongiovanni and me.

Thanks to all European colleagues who kindly filled in the Terminology Survey. Few countries are still missing. Hope to have participants also from few missing countries. Nevertheless, prof. Rossi has initiated analysis of data on Milan System and submitted the abstract to USCAP. Let us cross the fingers!

Data collected on cell blocks practice in Europe have been analyzed and manuscript has been prepared. This project was led by Dr. Irena Srebotnik Kirbiš, who in past led immunocytochemistry project.

Last but not least we have doubled in members: Pio Zeppa and Diana Esther Rossi have joined me and Massimo Bongiovanni, so stay tuned for new exciting projects!

Anyway, the projects can be also initiated by members of all affiliated societies. Any idea? Contact us!

Ivana Kholová
Chair of EFCS Scientific Committee



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<https://www.efcs.eu/>



Case Challenges!

Case Challenges!

1

68 – years old male presented with a tumour in the left lower lobe of the lung. CT-guided FNA was performed. The sample was stored in the cell medium. A cell block was made from a small fragment of tissue floating in the cell medium.

Fig. 1. Cell block, hematoxylin and eosin stain (H&E), x50

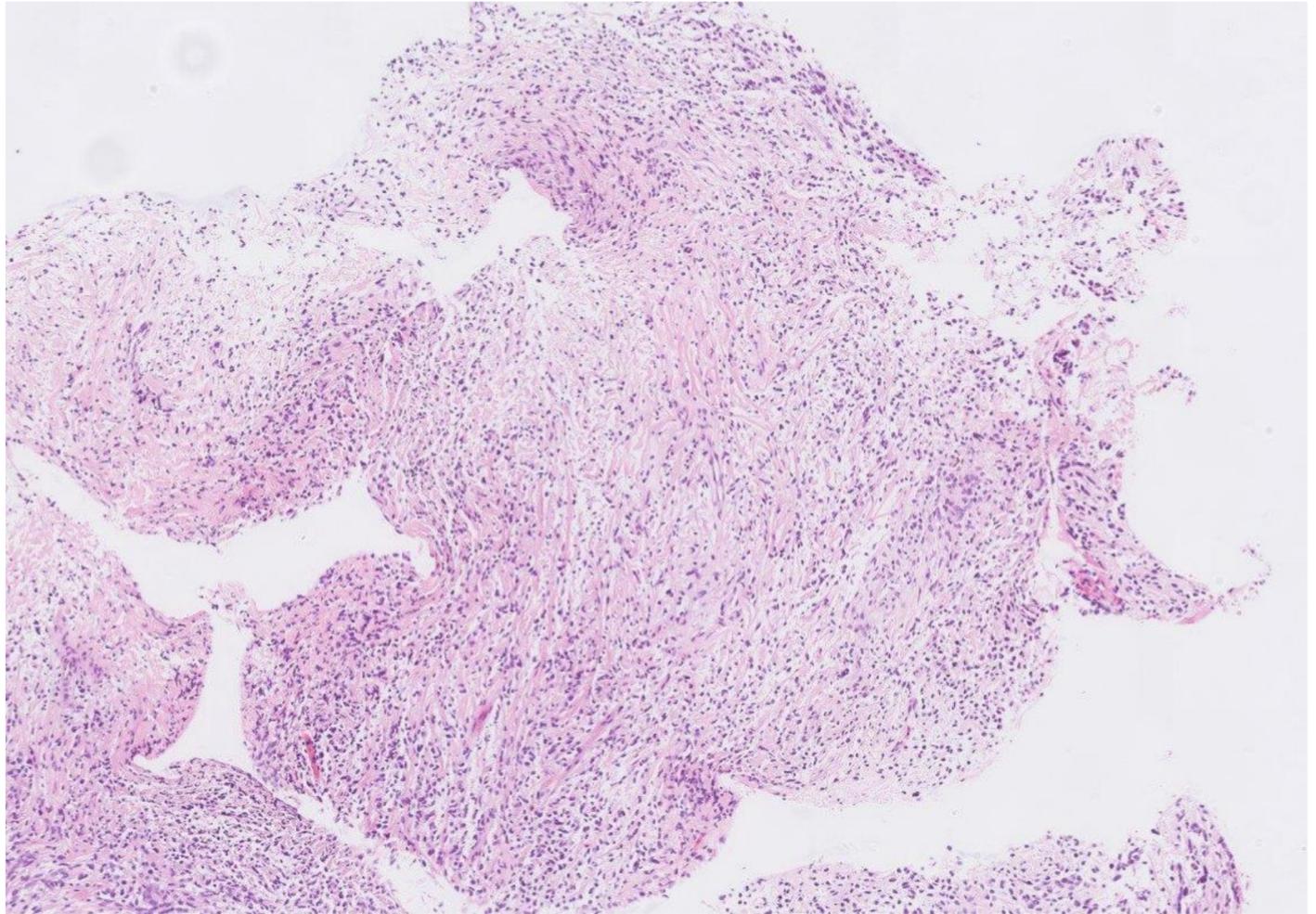
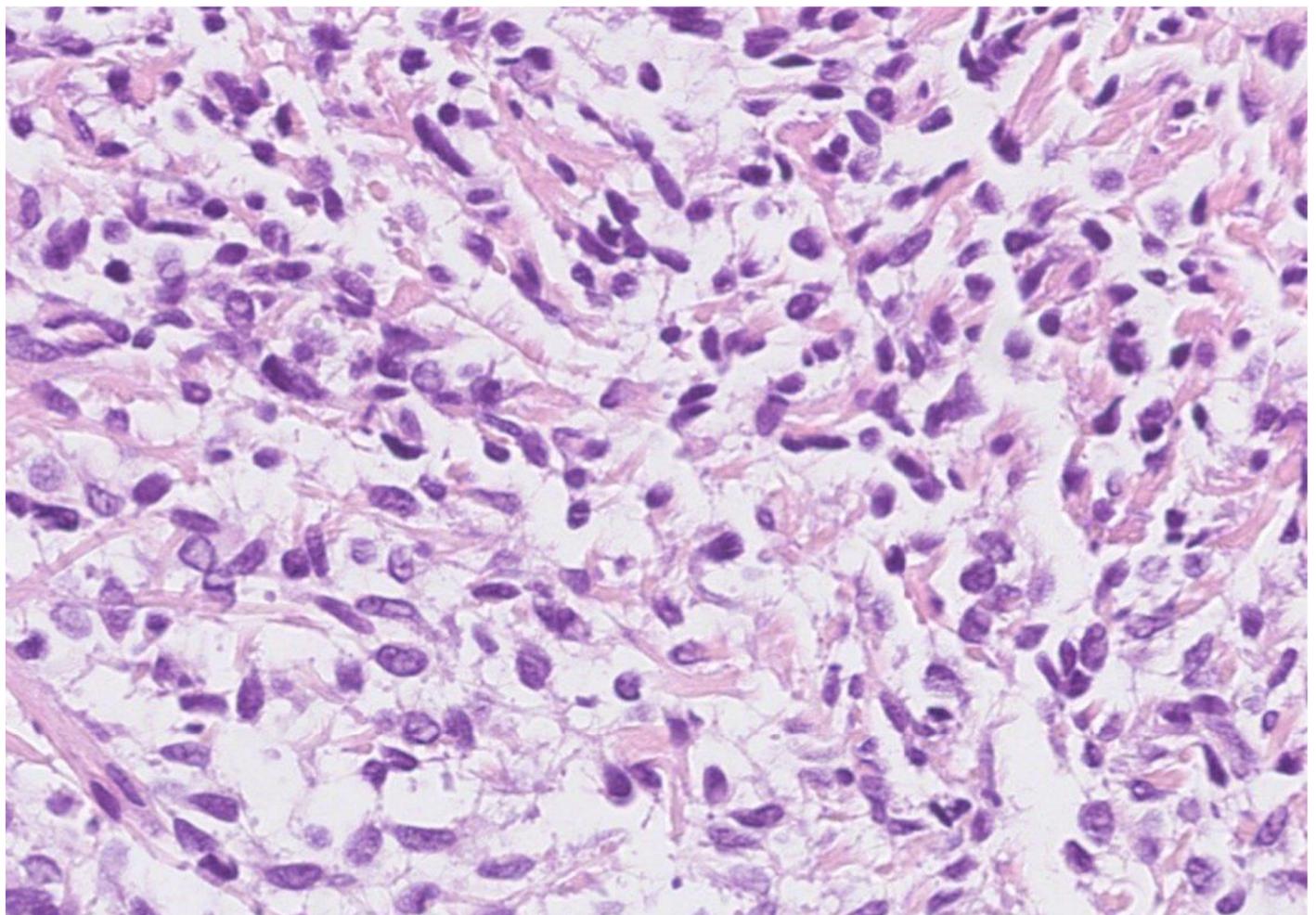


Fig. 2. Cell block, hematoxylin and eosin stain (H&E), x400

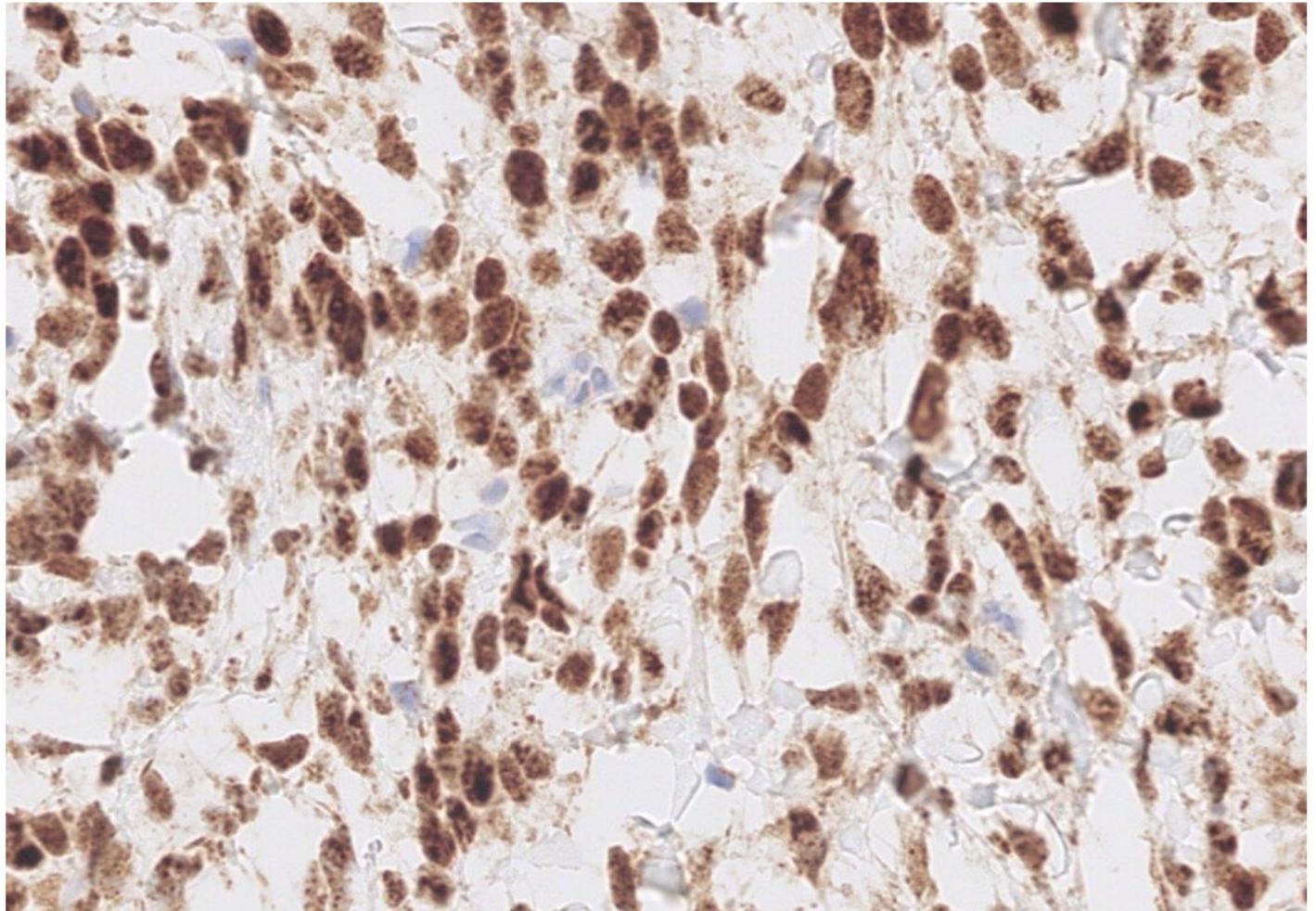


Case Challenges!

(Answer on the next page!)

1

**Fig. 3. Cell block,
immunohistochemical
reaction (IHC) STAT6,
x400**



Questions

- a) Describe what you see.
- b) What does it represent?
- c) What is its significance?

ANSWERS

1

68 – years old male presented with a tumour in the left lower lobe of the lung. CT-guided FNA was performed. The sample was stored in the cell medium. A cell block was made from a small fragment of tissue floating in the cell medium.

a) *Describe what you see.*

- cellular tumour
- mostly spindle-shaped tumour cells
- oval and spindle-shaped, hyperchromatic nuclei
- collagenized connective tissue stroma in the background

b) *What does it represent?*

A solid tumour, STAT6 positive, consistent with a Solitary Fibrous Tumour (SFT).

c) *What is its significance?*

Depending on the cytomorphological picture, the range of differential diagnoses is wide. Both primary lung tumours and metastases are considered, but a positive STAT6 immunohistochemical reaction is specific for SFT.

Comment:

Solitary fibrous tumour (SFT) is a fibroblastic neoplasm with characteristic histological appearance, immunohistochemical profile, and NAB2-STAT6 gene rearrangement. Most of them usually arise from visceral pleura. Morphologically similar tumours can occur in the lung and mediastinum, and at extrathoracic sites. These tumours are most often slow-growing, relatively benign neoplasms, but up to 10% are malignant. Recurrence occurs in 10-25% of thoracic SFT and is associated with incomplete resection. Tumours with > 2 mitoses/mm² in variable association with increased cellularity, atypia, necrosis or infiltrative growth have a greater rate of recurrence and metastases.

(Tavora F, Calabrese F, Demicco EG. Solitary fibrous tumour of the thorax. In: WHO Classification of Tumours Editorial Board. Thoracic Tumours. 5th ed. Lyon: International Agency for Research on Cancer; 2021. p. 284-285.)

Damjana Cimerman
Residents and YEFCS Committee

Marianne Engels
EFCS Scientific Committee

Case Challenges!

2

70 – years old female presented with a tumour in the oral cavity, in the left sublingual region. US-guided transcutaneous FNA of the lesion was performed with two MGG direct smears, and the remainder of the sample was stored in a cell medium.

Fig. 1. May-Grünwald-Giemsa stain (MGG), x50

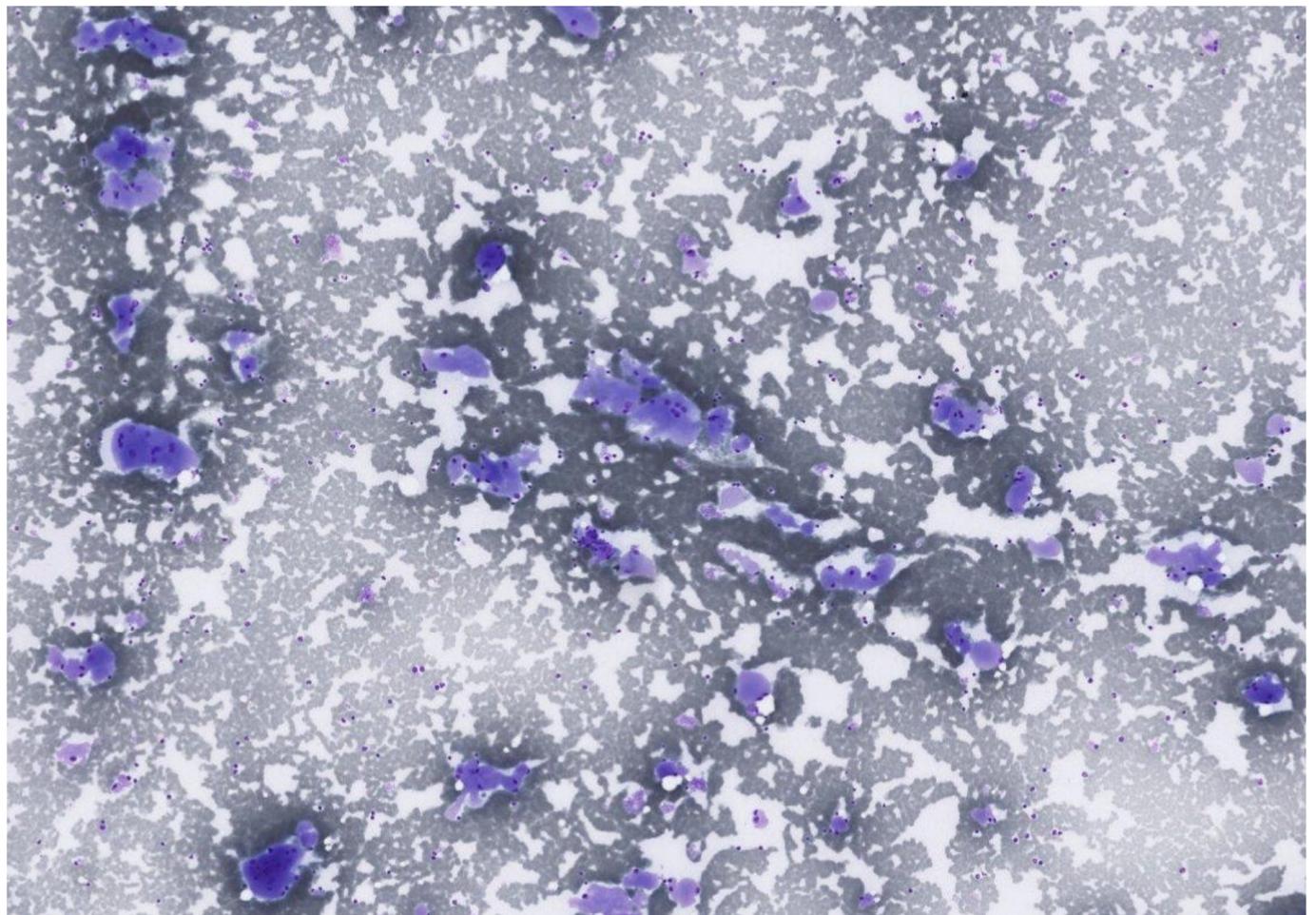
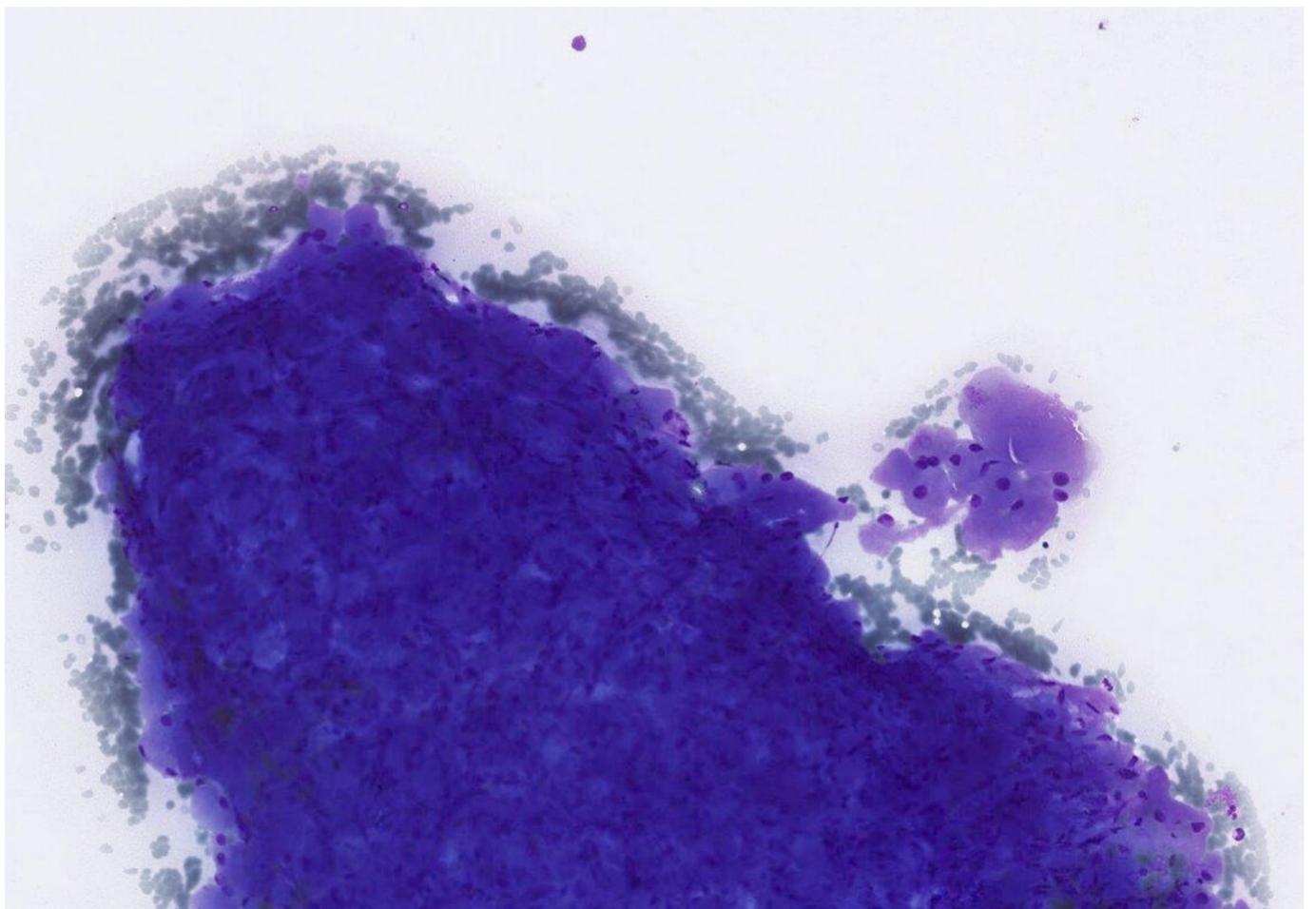


Fig. 2. May-Grünwald-Giemsa stain (MGG), x100



Case Challenges!

2

Fig. 3. May-Grünwald-Giemsa stain (MGG), x400

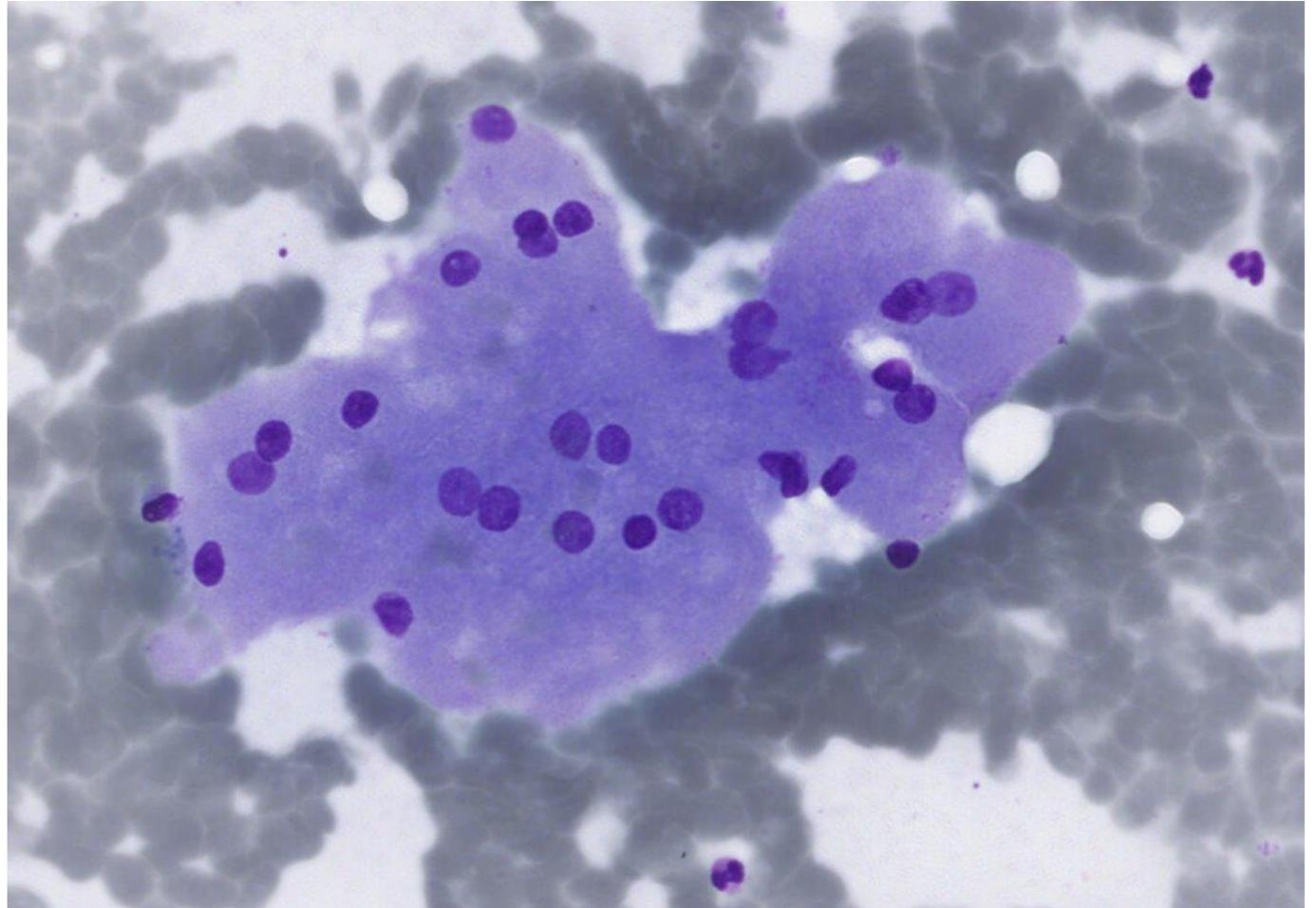
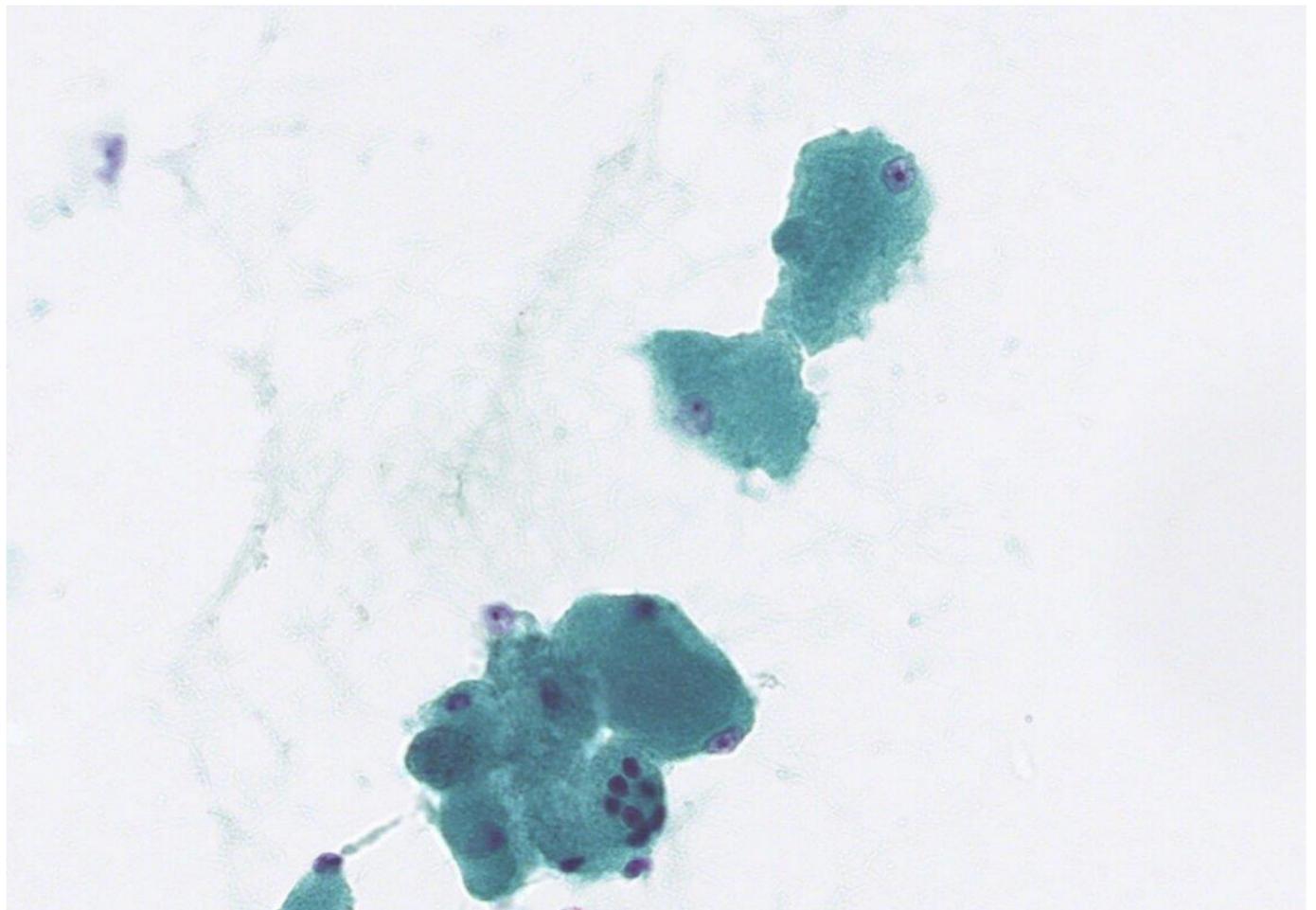


Fig. 4. Papanicolaou stain (PAP), x400

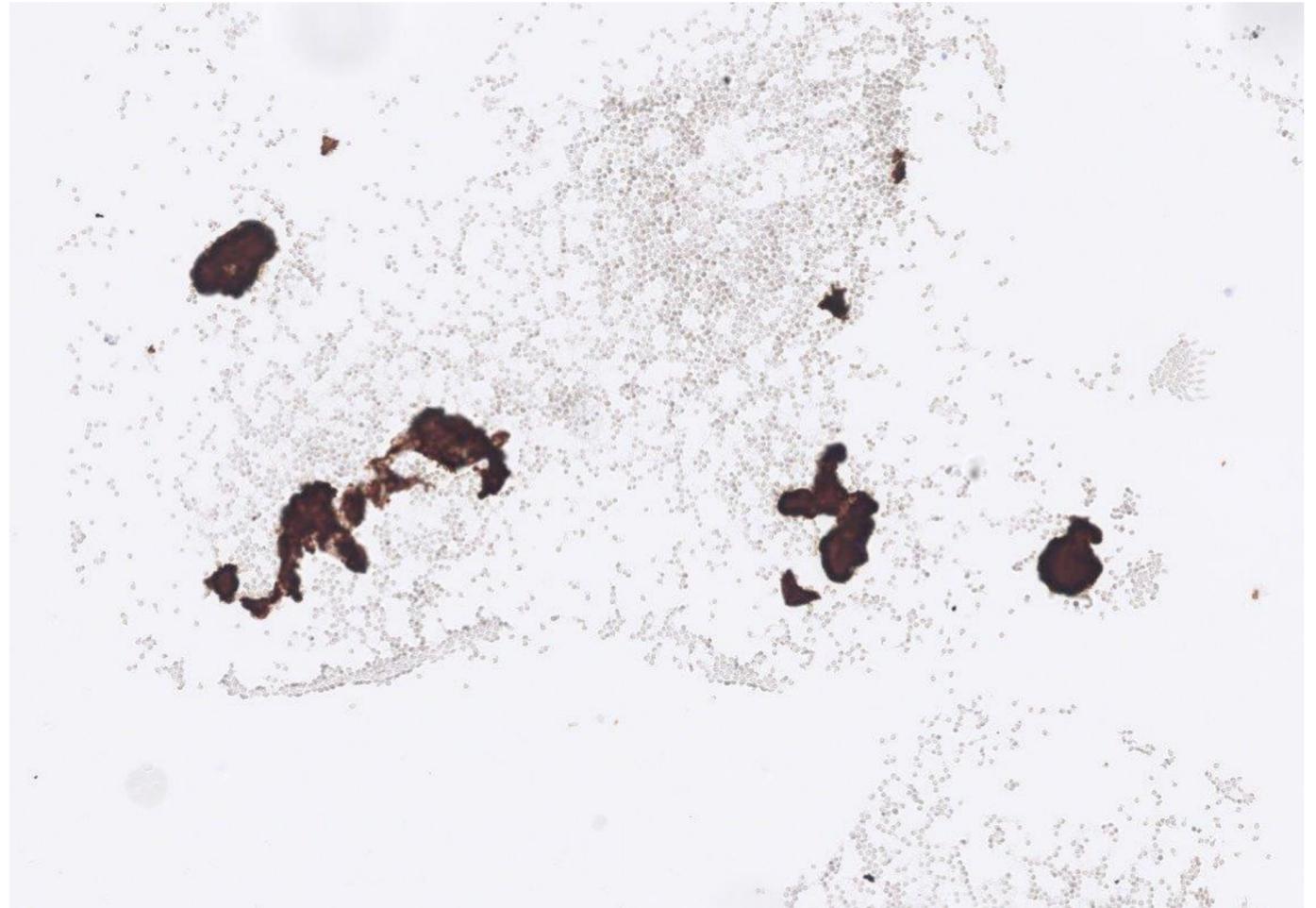


2

Case Challenges!

(Answers on the next page!)

Fig. 5.
Immunocytochemical
reaction (ICC) Desmin,
x100



Questions

- a) Describe what you see.
- b) What does it represent?
- c) What is its significance?

ANSWERS

2

70 – years old female presented with a tumour in the oral cavity, in the left sublingual region. US-guided transcutaneous FNA of the lesion was performed with two MGG direct smears, and the remainder of the sample was stored in a cell medium.

a) *Describe what you see*

- three-dimensional fragments, small aggregates and dissociated cells
- abundant, dense, markedly granular cytoplasm
- predominantly central or slightly eccentric, in a few cells peripherally located round and oval nuclei with nucleoli
- blood in the background

b) *What does it represent?*

The cytomorphological picture and positive result of Desmin (ICC) are consistent with the diagnosis of skeletal muscle regeneration.

c) *What is its significance?*

If the change clinically gives an impression of a tumour, it does not mean it is necessarily a neoplastic process. At the same time, we must not forget that a neoplastic process can be hidden next to a reactive process. Since there was no clinical data on the possible injury of the patient in the sublingual area, we excluded the possibility of associated granular cell tumour or melanoma with negative S100 and SOX10 immunocytochemical reactions.

Comment:

Different tissues consist of continuously dividing cells (epithelia, hematopoietic tissues), normally quiescent cells that are capable of proliferation (most parenchymal organs), and nondividing cells (neurons, skeletal and cardiac muscle). The regenerative capacity of a tissue depends on the proliferative potential of its constituent cells. Some tissues (called permanent tissues) consist of terminally differentiated nonproliferative cells, such as the majority of neurons and cardiac muscle cells. Injury to these tissues is irreversible and results in a scar, because the cells cannot regenerate. Skeletal muscle cells are usually considered nondividing, but satellite cells attached to the endomysial sheath provide some regenerative capacity for muscle.

(Kumar V, Abbas AK, Aster JC. Robbins Basic Pathology. 10th ed. Philadelphia, PA: Elsevier; 2018. p. 88-89.)

(Koshy J, Schnadig V, Nawgiri R. Is fine needle aspiration cytology a useful diagnostic tool for granular cell tumors? A cytohistological review with emphasis on pitfalls. Cytojournal [Internet]. 2014;11(28):28. Available from: <http://dx.doi.org/10.4103/1742-6413.143304>).

Damjana Cimerman
Residents and YEFCS Committee

Marianne Engels
EFCS Scientific Committee

Trivial Facts of Cytopathology



Did you know that fine needle aspiration dates back to 1846, when Kun attempted the first tumour diagnosis with the use of a needle?

After that, Menetrier, in 1886, used the technique to diagnose pulmonary carcinoma. But it was only up until 1927 that Dudgeon and Patrick, in the United Kingdom, proposed its use as a tool for a fast diagnosis of tumors. At that time, the fear of dissemination delayed the enthusiasm, only to be revived in mid 1950s, by Lopes Cardozo from Holland and Soderstrom and Franzen from Sweden. Around the 1970s, Joseph Zajicek, along Franzen and Torsten Lowhagen, in Karolinska Hospital, Sweden, defined precise diagnostic criteria by exhibiting complete clinical, histological and follow up data, leading to the resurrection of the technique up until today.

Find out more in the article *Origins of Fine needle aspiration cytology*, by Ansari NA, Derias Nw. *J Clin Pathol.* 1997. 50:541-543.

Despina Argyropoulou
Residents and YEFCS Committee

Thank you for your time!

Please send your feedback to residentsyoung@efcs.eu

Check our Twitter accounts: @CytologyEFCS and @efcsyoung



The EFCS Newsletter



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