

WABIP Newsletter



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Guest Opinion/Editorial

World Congress Joint Meeting of the World Association for Bronchology and Interventional Pulmonology (WABIP) & The International Bronchoesophagological Society (IBES) 2018



Silvia Quadrelli, MD
Buenos Aires, Argentina
Vice-chair, WABIP

Every other year, the World Congress Joint Meeting of the World Association for Bronchology and Interventional Pulmonology (WABIP) & The International Bronchoesophagological Society (IBES) 2018 provides international participants unmatched opportunities to exchange scientific ideas & research in bronchology and interventional pulmonology. This World Congress is a unique forum for physician's, new technology developers, academic researchers and end users to share the latest advances in bronchoscopy techniques and their applications in human health.

This year, the 20th WCBIP/WCBE World Congress WABIP & IBES has been held in Rochester, MN US in June 13-16, 2018 and has not been the exception of this long tradition of academic exchange. Experts from all over the world discussed during 3 days wide topics from the role of new technologies (like cryobiopsy, thermoplasty, endoscopic ultrasound) to the management of the

most relevant tracheal, bronchial and pulmonary parenchymal diseases. Tracheoesophageal fistulas, lung cancer, obstructive lung disease, lung nodules, interstitial lung diseases or tuberculosis were studied from the perspective of different countries and bringing management options for the different contexts and the different availability of technology. Didactic lectures, interactive sessions and expert panel discussions allowed to discuss the newest findings in airway diseases. Hands-on workshops gave the opportunity to practice the different interventional procedures guided by experts in bronchoscopy education.

The excellent conference venue offered by the Mayo Civic Centre was the perfect scenario for this international conference. The ample and comfortable facilities, ideal for educationally focused events as our World Congress created a wonderful ambiance to exchange ideas, discuss scientific trends, and explore solutions to the old and new challenges in bronchology.

The 20th WCBIP Congress President (Eric Edell) and the WCBE President (Dr. Jan Kasperbauer) did a wonderful job that surpassed all the expectations. A complete and varied academic program, an outstanding organization and a fabulous social agen-

da that allow all the attendees to create new friendship, learn in the most stimulating way and know the history and the past and present of one of the most famous medical institutions in the world.

We are sure that all the Congress attendees share the same gratitude the WABIP-WCBE leadership expresses for such a successful conference and such a fantastic opportunity to meet our colleagues all over the world bringing back home the warmest memories and a renewed enthusiasm to keep on working for the development of bronchoscopy in each one of our countries.

Technology Corner

Near-infrared imaging during VATS with transbronchial injection of ICG



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Introduction: Recent advances in CT screening has resulted in the increase of early stage lung cancer detection, specifically small peripheral lung cancer. Various methods of intraoperative localization of such small nodules during minimally invasive surgery have been reported. Furthermore, pulmonary sublobar resection has been recognized as an operative option for complete resection of these early stage lung cancers [1] and metastatic lung tumors. Sublobar resection is ideal for preservation of lung parenchyma, pulmonary function, with lower perioperative morbidities and can be applied for surgical management of additional primary lung cancers that may develop after initial resection. Recent surgical topics in lung neoplasms are how to manage a non-palpable small nodule in the peripheral or intermediate portion and how to maintain adequate surgical margins during sublobar resection. To answer these questions, the establishment of precise tumor marking method as well as anatomical sublobar resection with measurable surgical margin is crucial.

Background: The standard approach for anatomical lung segmentectomy is vascular and bronchial transections followed by division of intersegmental planes. However, this method has several obstacles especially in complex segmental resection. The identification of segmental bronchus and associated vessels is sometimes difficult and intraoperative inflation of the lung can be a challenge during thoracoscopic surgery. Although the confirmation of an appropriate resection margin from the tumor is crucial for reducing the risk of local recurrence [2], there has been no reliable method of measurement.

The common methods for localization of small sized pulmonary nodules are microcoil or hook wire implantation and dye marking by CT guidance or transbronchial insertion. However, these methods are sometimes time consuming, technically challenging, may require high cost and may induce rare but severe complications.

We previously developed and reported a novel approach for performing segmentectomy by using a Near-infrared thoracoscopy with transbronchial instillation of indocyanine green (ICG) [C]. We improved this method by combining with the most advanced computer technology of making virtual sublobar resections and established a precise anatomical sublobar resection with enough surgical margin. This method can also serve both as tumor localization marking and anatomical super deep wedge resection for early stage lung cancers and metastatic lung tumors.

Clinical applications: There are two types of ICG identification in ICG-guided segmentectomy [3,4]. One is negative staining by intravenous injection of ICG after pulmonary arterial division [3]. The other is positive staining by transbronchial instillation of ICG before operation [4]. The surgical step of negative staining is basically the same with traditional approach, vascular and bronchial transection followed by segmental division after ICG i.v. injection. On the other hand, positive staining is simultaneous process of vascular and bronchial division and segmental division because of possible initial identification of segmental planes.

In negative staining, after vascular and bronchial divisions, 0.25 mg/kg of ICG is intravenously injected. Soon after injection, ICG fluorescence is visualized in circulated area. Therefore, ischemic area, which is the segments to be resected, is not stained. Although this condition continues for only 60 to 90 seconds because of quick circulatory distribution, ICG injection can be done repeatedly.

In positive staining, before operation, virtual segmentectomy is created by using a 3D-CT volume analyzer and appropriate area of segmentectomy is decided based on surgical margin (Fig. 1). Under general anesthesia, 10ml of 10-fold diluted ICG is instilled into each associated bronchus. ICG is continuously remained in the segmentectomy area. ICG staining continues for several hours. Therefore, we can confirm resection area at any time during operation and confirm vessels and bronchus to be divided (Fig. 2).

Furthermore, we created anatomical super deep wedge resection by ICG fluorescence system. When the tumor is very small and deep from the lung surface, it is impossible to palpate. The surface marking may not be effective because the depth cannot be speculated. In these cases, virtual sublobar resection is created in order that the nodule is placed in the center of simulated resection area (Fig. 3). Then, ICG is instilled in the same manner. Anatomical deep lung wedge resection is possible by dividing the lung along the ICG borderline without individual vascular transection with enough surgical margin (Fig. 4). In particular, this procedure can confirm central surgical margin, because all removal area is displayed by fluorescence.

Conclusion: Transbronchial ICG instillation and ICG-guided sublobar resection is feasible for early stage lung cancers and metastatic lung tumors. This method can be applied to tumor localization and is also useful for assuring good surgical margin during complex sublobar resections.

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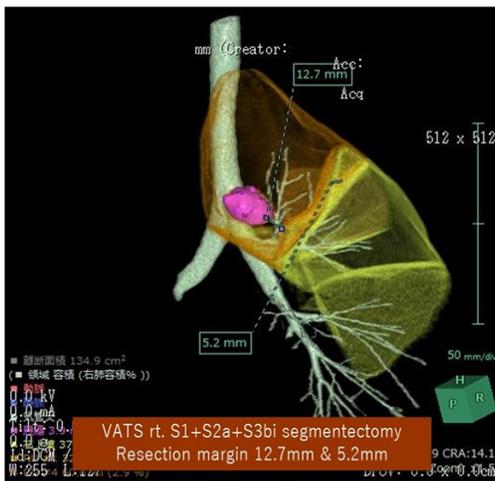


Figure 1: Virtual 3D image of right S1+S2a+S3bi segmentectomy. There are two nodules in the right upper lobe at S2a and S3b in patients with metastatic lung tumor from renal leiomyosarcoma.

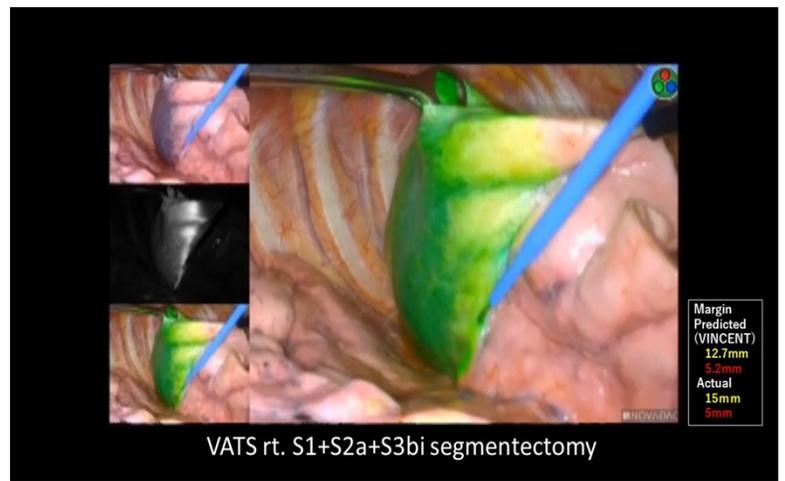


Figure 2: Actual image of ICG-guided segmentectomy which completely matches with a virtual image.

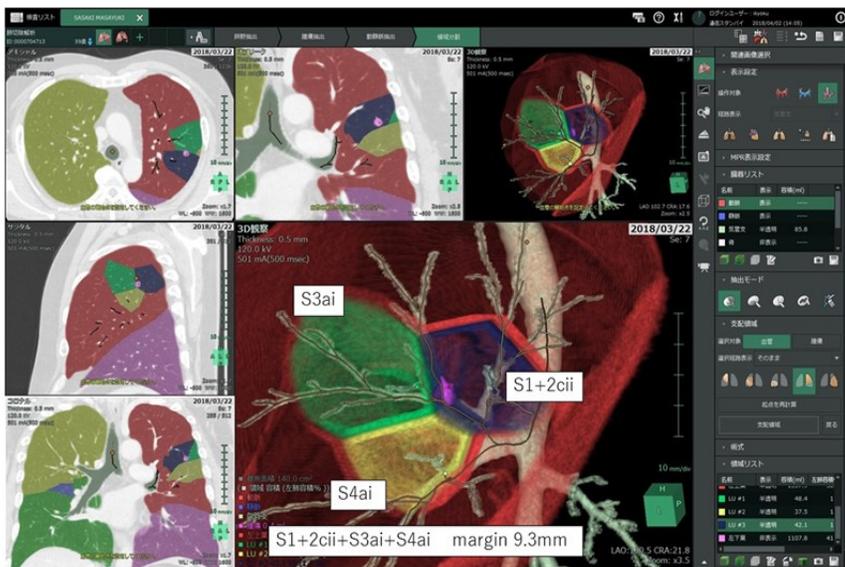


Figure 3: Virtual 3D image of anatomical super deep wedge resection (ASDWR). The nodule is located in S1+2cii and S3ai. To obtain enough margin, S4ai is added. This bronchus is a sixth bronchial bifurcation counting from the carina.

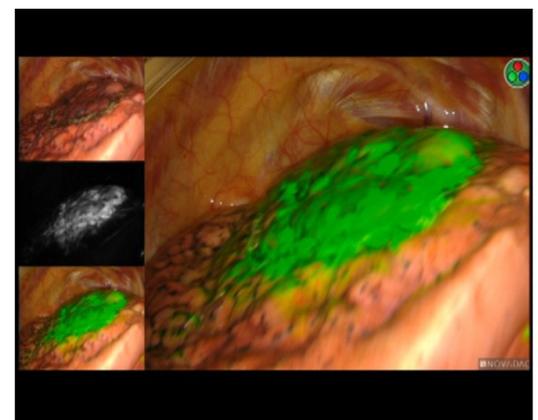


Figure 4: Actual image of ICG-guided ASDWR which completely matches with a virtual image. This procedure is useful as a tumor localization marking.

BRONCHOALVEOLAR LAVAGE

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Since Myrvik's 1961 described technique for obtaining pulmonary macrophages from rabbit lungs and Reynolds and Newball's 1974 description of a 'liquid lung biopsy' described as bronchoalveolar lavage (BAL) in normal healthy subjects and patients with various intrathoracic lesions, BAL has been used to assess inflammation in patients with lung infections, cancer, exposure to toxic substances, asthma, and chronic obstructive pulmonary disease, as well as to support or exclude causes of alveolitis, monitor the status of lung allografts, help diagnose illnesses such as histiocytosis, pulmonary alveolar proteinosis, peripheral lung cancer, asbestos-related lung disease, and berylliosis, and monitor fluid cell differentials in patients with interstitial lung disease. Furthermore, translational research studies of BAL fluid, including studies of surfactant, inflammatory proteins, cellular differentials, serum molecules and proteomics/gene expression have increased our understanding of lung inflammation and pulmonary injury/repair processes in adults and children. In both healthy individuals and patients, BAL findings are influenced by degree of atopy, age, smoking status and underlying pulmonary conditions (1).

Because alterations in BAL fluid and cells reflect alterations in lung parenchyma, careful attention must also be paid to sampling procedures, specimen processing, and precise analysis of cell differentials. Numerous techniques for BAL have been described, although all follow a few general guidelines. The goal of the procedure is to sample the largest target area possible by wedging a flexible bronchoscope into a distal airway, instilling several aliquots of isotonic saline solution (warmed to room temperature) in a way that "floods" target bronchial and bronchioloalveolar territories, and retrieving that fluid for analysis without contaminating the specimen with an overabundance of squamous bronchial epithelial cells (of which there should be less than 4 percent per specimen). Ideally, BAL fluid should contain solute and cells that reflect the underlying pathophysiologic disease process. The location for sampling is dependent upon the clinical indications, with most operators reporting decreased yield from gravity dependent lower lobes, and maximum yields from the middle lobe or lingula, even in patients with diffuse lung disease. In patients with focal disease, target regions can be identified based on careful review of high-resolution computed tomography scans.

Various methods for determining BAL instillation volume have also been described and adjusting the amount of instilled volume (per weight of the subject) has been proposed at least in children. Quantities instilled may vary based on clinical setting and instillation technique, as well as on underlying disease or normality and instillation protocols (2). Technique is important because studies have shown that many factors can influence the quality and composition of BAL samples, including the volume of saline instilled and the length of dwell time between instillation and withdrawal. Most operators today recommend techniques within or close to the framework provided in guidelines such as one published by the American Thoracic Society (3), including clear wedging of the flexible bronchoscope in the target bronchopulmonary segment, instilling more than 100cc but less than 300cc of isotonic saline solution, and using 3-5 sequentially instilled aliquots via a handheld syringe (although some operators instill via tubing). Fluid is retrieved by gentle suction that can be performed using the syringe, or by using the suction channel of the bronchoscope (wall suction should probably be reduced to between 60 mm and 100 mm). In both instances it is often possible to watch the stream of air bubbles as fluid is aspirated (See Figure 1).

Suction should be applied such that airway walls do not collapse completely. It is generally accepted that the first aliquot of at least 20 ml will contain mostly bronchial cells and protein, and for this reason many operators will discard the first aliquot in cases of interstitial lung disease and when BAL is done for research purposes or any indications other than presumed infection or malignancy. Recall that bronchoalveolar lavage (many experts say the procedure should really be called bronchioloalveolar lavage) samples a distal bronchoalveolar territory and is therefore different from a bronchial wash. To maximize fluid return, some operators time fluid instillation and aspiration with the patient's respiratory efforts. Others insist on dwell times of at least a few seconds venturing up to 20 seconds. Regardless of details, most authors report a BAL fluid return of more than 10 percent of the amount instilled (and ideally closer to 40 or 50 percent) as necessary to be considered satisfactory and reliable (4).



Figure 1: BAL fluid instillation after wedging the flexible bronchoscope into the distal bronchus. Bubbling is noted along with a patent airway during gentle suction and fluid retrieval (note absence of airway wall collapse). From Colt HG, [www.Bronchoscopy.org \(https://www.bronchoscopy.org/ppt-art/AB-2A/AB-2a.ppt\)](https://www.bronchoscopy.org/ppt-art/AB-2A/AB-2a.ppt).

In conclusion, many papers describing BAL in healthy and diseased patients report a variety of different techniques, but follow a few general rules such as: selecting the target region using computed tomography, gradual instillation of a set amount of fluid using several aliquots, gentle suction of fluid in a way that avoids airway wall collapse, avoiding bronchial epithelial cell contamination of specimens, and separating samples into site-specific sterile containers dependent on the needs and preferences of the institution's laboratory and depending on tests requested (cytology, proteomics, cell counts and differentials, T-cell subtyping and other phenotypic stains, immunology, microbiology etc..) (5). Sending less than 15 cc of BAL fluid to the laboratory is not recommended because such samples usually contain a low number of cells and thus may be unreliable. In my opinion, while BAL techniques are varied across countries and across medical institutions, procedures should be standardized as best possible, and performed in a uniform manner by bronchoscopy teams within an institution after consultation with laboratory personnel, dependent of course on logistics, medical expertise, needs, and indications for the procedure. It goes without saying that patients should be monitored for BAL-related adverse events, which although infrequent, include transient or delayed hypoxemia, bronchospasm, pneumothorax, and bacteremia. Readers may refer to a multitude of review papers, book chapters, and scientific studies for information about indications, contraindications, precautions in select populations, ethics of performing the procedure especially in the research setting or in healthy subjects, complications, specimen handling, fluid processing and analysis, and other step-by-step descriptions/guidelines/summaries of BAL procedural techniques.

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Humanitarian News

The different actors of the humanitarian world: The International Committee of Red Cross

The International Committee of Red Cross (ICRC), was established in 1863. Its mission is to work worldwide to ensure humanitarian protection and assistance for people affected by conflict and armed violence. Their activities are launched in response to emergencies and with the main commitment of assuring the respect for international humanitarian law. It is an independent and neutral organization, whose mandate is based on the Geneva Conventions of 1949.

The group that was going to become the International Committee of the Red Cross met for the first time in February 1863 in Geneva, Switzerland. One of the five members was a Swiss named Henry Dunant author of a recent published book named "A Souvenir of Solferino".

The Battle of Solferino had taken place on 24 June 1859 resulting in the victory of the Napoleonic French Army and Sardinian Army against the Austrian Army. The battle was a particularly brutal one, and resulted in more than 2000 Austrian troops killed and more than 10,000 wounded. There were reports of wounded and dying soldiers being shot on both sides, configuring a particular horrifying war scenario. Jean-Henri Dunant, who (being there for a business trip) witnessed the aftermath of the battle in person, was motivated by the horrific suffering of wounded soldiers left on the battlefield and started social and political advocacy against the cruelty in war, a campaign that would eventually result in the Geneva Conventions and the establishment of the International Red Cross. Dunant could witness the thousand wounded, dying and dead remained on the battlefield, and the absence of any attempt to provide care. He was shocked, and organized the civilian population, especially the women and girls, to provide assistance to the injured and sick soldiers. Most importantly, he convinced the population to service the wounded without regard to their side in the conflict under the motto "Tutti fratelli" (All are brothers). His ideas were the basis of the 1864 Geneva Convention. In 1901 he received the first Nobel Peace Prize together with Frédéric Passy. Dunant and his colleagues got to meet government representatives to agree on Dunant's proposal for national relief societies, to help military medical services to provide medical care. Afterwards, they convinced governments to adopt the first Geneva Convention, obliging armies to care for wounded soldiers, whatever side they were on. The Red Cross on a white background became the emblem of this new unified neutral medical services.

Currently, the work of the ICRC is based on the Geneva Conventions of 1949, their Additional Protocols, its Statutes – and those of the International Red Cross and Red Crescent Movement – and the resolutions of the International Conferences of the Red Cross and Red Crescent. The ICRC is an independent, neutral organization ensuring humanitarian protection and assistance for victims of armed conflict and other situations of violence.

The ICRC's primary role was a coordinating one. But it gradually became more involved in field operations, as the need for a neutral intermediary between belligerents showed to be increasingly important.

The action of the ICRC is based on 7 fundamental principles: Humanity, impartiality, neutrality, independence, voluntary service, unity and universality. Those principles provide the ethical, operational and institutional framework to the work of the Red Cross and Red Crescent Movement.

Adherence to these principles ensures the humanitarian nature of the Movement's work and gives the ethical framework for its activities around the world.

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The ICRC is a multi-state organization because it is funded by voluntary contributions from the States party to the Geneva Conventions (governments); national Red Cross and Red Crescent societies; supranational organizations (such as the European Commission); and public and private sources. That is a different structure and profile than the one of the international humanitarian NGOs. A non-governmental organization (NGO), or "civil society organization" is a not-for-profit group, principally independent from government, which is organized on a local, national or international level to address issues in support of the humanitarian aid. There are usually task-oriented (health, education, human rights, housing, etc.) and made up of people with a common interest. The NGOs give direct services and humanitarian functions, but also have a strong task of advocacy (depending on each organization) bringing public concerns to governments, monitoring policy and program implementation, and engaging the civil society in the direct action.

This differentiation is essential and clearly established by the Sphere Project: NGOs (Non-Governmental Organizations) refers to organizations, both national and international, which are constituted separately from the government of the country in which they are founded. That is different from the NGHAs: (Non-Governmental Humanitarian Agencies) that include the components of the International Red Cross and Red Crescent Movement - The International Committee of the Red Cross, The International Federation of Red Cross and Red Crescent Societies and its member National Societies - and the NGOs as defined above. A different category are the IGOs (Inter-Governmental Organizations) name that refers to organizations constituted by two or more governments. It thus includes all United Nations Agencies and regional organizations.

This differences between NGOs and multi-government agencies are reflected in the different mandates they work on. The legal mandates of international agencies working in humanitarian operations are of two main types: state-mandated or self-mandated. United Nations organizations, like UNHCR, UNICEF, UN WFP, UN WHO and UN OCHA, have international mandates that are legally recognized by states. So too do the International Committee of the Red Cross (ICRC), the International Federation of Red Cross and Red Crescent Societies, National Red Cross/Crescent Societies and the International Organization for Migration (IOM). These agencies can be described as state-mandated. All other agencies – largely NGOs and CBOs - tend to be self-mandated as voluntary organizations set up as private initiatives seeking public support. Self-mandated agencies are usually registered, recognized and regulated by states to differing degrees but do not carry a formal international mandate. This first sense of the term mandate reflects an idea of international legitimacy grounded in the power of either states or civil society.

As clearly marked by Steven Ratner, "The ICRC thus represents a sui generis entity in the international legal process. Its status under Swiss law as a private association makes it akin to an NGO. The role of states in the Movement and the international conferences that guide some of the ICRC's work, the funding by governments, and the ICRC's image through its delegations resemble the workings of an international organization. Its close ties to Switzerland – its location, the nationality of Committee members and senior staff, and frequent contacts with the Swiss Foreign Ministry¹⁸ – give it a profile unique among international organizations and NGOs; and the ICRC clearly benefits from Switzerland's reputation of neutrality in international affairs. Governments and armed groups suspicious of the motives of NGOs based in the United Kingdom, the United States, or France will be less likely to attack the motives of the ICRC".

Even when their relation with the different governments and their source of funds give each one of those categories very different profiles and responsibilities in front of their funders, all of them share the Code of Conduct that must rule the activities of any humanitarian organisation. The first and main component of the Code of Conduct is: The Humanitarian imperative comes first. This means that the right to receive humanitarian assistance, and to offer it, is a fundamental humanitarian principle which should be enjoyed by all citizens of all countries. As members of the international community, the humani-

Humanitarian News

tarian actors recognise their obligation to provide humanitarian assistance wherever it is needed which requires unimpeded access to affected populations as a fundamental component of that responsibility. The prime motivation is to alleviate human suffering and no political motivation should be included in their choices.

The humanitarian imperative (according to UNICEF) means that “human suffering must be addressed wherever it is found, with particular attention to the most vulnerable in the population. The dignity and rights of all those in need of humanitarian assistance must be respected and protected”. The humanitarian imperative implies a right to receive humanitarian assistance and a right to offer it. At times, humanitarian access to civilian populations is denied by authorities for political or security reasons. Humanitarian agencies must maintain their ability to obtain and sustain access to all vulnerable populations and to negotiate such access with all parties to the conflict.

In spite of some apparently clear mandates and definitions, humanitarian action is currently challenged by many evolving and changing practice in warfare. New geo-political tensions and some more classical problems of neutrality, protraction and relief ethics make humanitarian policy and practice more and more difficult in the current times. Managing these tensions requires constant and prudential judgement by the different humanitarian actors. But the humanitarian aid all over the world requires the continuous support of the civil societies and the understanding of their responsibility in monitoring the respect of international law by their States, a responsibility that civilian and ordinary citizens cannot delegate.



*The views expressed in this article are those of the author and do not necessarily reflect the official positions of the Executive Board or International Board of Regents of the WABIP. Dr. Silvia Quadrelli is Vice-chair of the WABIP.

Education and Training

An overview of Bronchoscopy Practises in the UK

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Bronchoscopy remains a very important investigative tool used by Respiratory Physicians in almost all centres in UK providing Respiratory Medicine services, an approximate estimate of about 450-500 Respiratory Physicians would be performing Bronchoscopies around the UK

Bronchoscopy lists are usually 1-2 in the week in each centre, usually done in a dedicated Edoscopic suite and the patient is given sedation with Midazolam on an average between 2-3 milligrams, very occasionally patients with low or borderline saturations would be done without sedation. Lignocaine Nasal or Oral spray is often used, Lignocaine 1%, 6-8 millilitres via syringe for the vocal cords and similar amounts for the carina and Right and Left main Bronchus used. Most centres would have Pulse Oximetry, ECG and Blood Pressure monitoring throughout the procedures. Most performers would do from the back of the patients but 40-45 % Bronchoscopists would do it from the front and nasal route as opposed to oral route

With the advent of Linear Endobronchial Ultrasound (EBUS) Trans bronchial Needle Aspiration (TBNA) biopsies the number of Bronchoscopies have been reduced, but almost one in four Respiratory set up around UK are using Linear EBUS for diagnostics in Lung cancer diagnosis by biopsying the Mediastinal Lymph Nodes. So the approach is usually Hit and Run for diagnostic reasons but some would also do complete staging as well as diagnostics for Lung cancer and other cancers causing Mediastinal Lymph Node enlargement. Only few centres would have lists under General Anaesthesia perhaps once in a months.

Most centres would use Fentanyl 50-100 micrograms on an average for cough suppression before starting EBUS procedures.

Rapid on site Examination and slide evaluation (ROSE) is restricted in very few centres where on site Cytopathologist is available so restricted to few Teaching hospital set-ups. Only few centres would use Radial EBUS and very few centres would use Navigational Bronchoscopy for biopsying peripheral lung lesions

Both conventional Bronchoscopy and EBUS TBNA biopsy is a part of curriculum training in most of the regions and trainees expected to have 200-300 Bronchoscopies in the five years of Specialist Registrar training in UK with the aim of doing the procedure unsupervised in the final year of training if not already achieved. The numbers for EBUS is around 40 EBUS TBNA procedures to be done under supervision before reaching competence levels to be able to do it independently. We do have simulated training and Bronchoscopy training on Mannequins in UK with various training courses before starting Bronchoscopy or EBUS in real patients. Transbronchial Lung biopsies also part of training Bronchoscopy in UK as well as Bronchial Biopsies with an expected hit rate of 80% on Endobronchial visible tumours and Brushings and Bronchoalveolar Lavage.



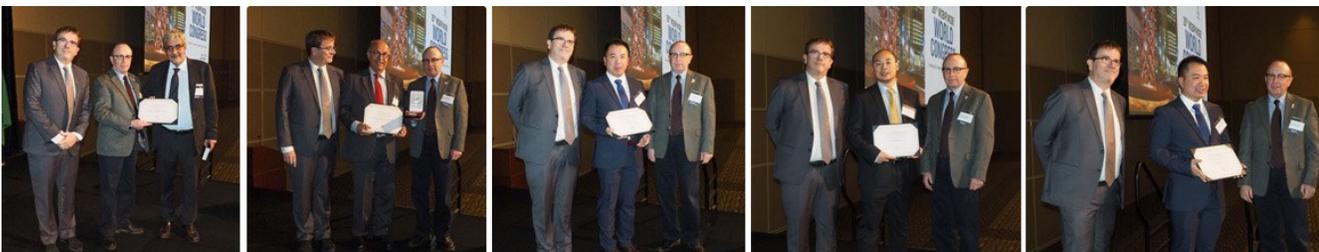
20th WCBIP/WCBE – Co-organized with the Mayo Clinic, the Rochester world congress has just concluded this past June, and we are happy to have welcomed the hundreds of attendees from over 40 countries, abstract presenters, faculty and keynote presenters, sponsors and more. We would like to express our heartfelt gratitude to Dr. Eric Edell and staff for organizing a very successful congress with the most in-depth scientific program for a WCBIP event to date.



(Left to right: Dr. Edell with his opening remarks; Native Pride Dancers celebrating and blessing our gathering of guests at opening ceremony; Prof. Udaya Prakash presenting)

WABIP Awards - These awards recognize our members who have made a significant impact on the art and science of bronchology, whether as a result of lifelong career achievements or submitting an innovating and breakthrough abstract. Without further ado, we are happy to announce the recipients of the 2018 WABIP Awards, who are:

- The Gustav Killian Centenary Medal: Dr. Stefano Gasparini
- WABIP-Dumon Award: Dr. Pablo Diaz-Jimenez
- The Heinrich Becker Young Investigator Awards for Research and Clinical Innovation: Dr. Liyan Bo, Dr. Alex Chee, and Dr. Yu Chen



(Left to right: –WABIP Chair Dr. Zsolt Papai and Awards committee chair Dr. Pedro Grynblat presenting to Dr. Gasparini, Dr. Diaz-Jimenez, Dr. Bo, Dr. Chee, Dr. Chen)

New Executive Board - As the Rochester WCBIP congress has drawn to a close, a new term for leadership in the WABIP has begun. We are pleased to introduce the new roster of the Executive Board, who are:

Chair: Silvia Quadrelli, M.D. (Argentina)

Vice-chair: Hideo Saka, M.D. (Japan)

Immediate Past-chair: Zsolt Papai, M.D. (Hungary)

Treasurer: David Fielding, M.D. (Australia)

21st WCBIP President: Guangfa Wang, M.D. (China)

22nd WCBIP President: Philippe Jean Astoul, M.D. (France)



(Left to right: Dr. Quadrelli, Dr. Saka, Dr. Papai, Dr. Fielding, Dr. Wang, Dr. Astoul)

Responsible for the “big picture” functioning and operations of the association, the WABIP Executive Board will continue to move forward with our organization's mission and goals in advancing patient care, research, and education in bronchology, interventional pulmonology and related areas.



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Research

The Holy Grail of Pleurodesis

“Out Patient Pleurodesis”

The pursuit of outpatient pleurodesis has long been the focus of Interventional Pulmonologists.

As physicians taking care of patients with advanced malignancies and Malignant Pleural Effusions (MPE), we are well aware of the ominous prognosis of a majority of these patients with few exceptions such as breast cancer. In malignancies such as lung cancers, several studies (1) show a dismal prognosis of less than a few months after the discovery of MPE. In scenarios like these, the goal of therapy is more focused on palliation rather than cure and quality of life takes precedence over longevity with suffering. Patients with such malignancies usually have already spent an inordinate amount of time in and around the hospitals for the diagnostic workup, extensive multi-modality treatments including chemotherapy, surgery, and radiation therapy. Quite often they have also had recurrences, metastasis, and other complications adding to their hospital visits and stays. MPE is and should be considered just another manifestation of the above mentioned, i.e., recurrence, metastasis, or complication. The traditional approach of managing MPE has been repeated thoracentesis or a chest tube placement with or without chemical pleurodesis in an inpatient setting. A large number of these patients are poor candidates for surgical interventions such as mechanical pleurodesis or decortications in case of complex MPEs. These approaches can take several days of hospital stay which takes away a big part of patient’s precious time from family and loved ones, not to mention the exponentially high cost of hospitalization compared to home and hospice.

As a consequence, Interventional Pulmonologists have been on the lookout for ways to manage MPE and other chronic, recurrent, and symptomatic pleural effusions in an outpatient setting. In the last approximately 15 years, the invention of Indwelling Pleural Catheters (IPC) from Denver, Colorado USA has proven to be a significant step forward in that direction. Now there are several iterations of these catheters available around the world. IPC can be placed in the procedure rooms or the clinics without admitting patients to the hospital and can be drained by the patients themselves, their family members or health care workers. Once there is no more fluid drained for three consecutive drainages, which usually happens in approximately 47% of the patients in approximately 54 days (2), these catheters can be removed in the outpatient offices or clinics. However, as mentioned earlier, about 50 % of the patients may continue to drain for several months and beyond or require an inpatient chemical pleurodesis via the existing catheters or more invasive procedures to achieve pleurodesis. Even in patients who do achieve pleurodesis by merely draining the catheter at home on a daily basis or every other day basis, pleurodesis could take upwards of 50 days as mentioned earlier. Naturally, the next goal of physicians has been to achieve outpatient pleurodesis in more patients and much shorter period using IPCs. There are several studies underway to achieve just that. These studies include drug-eluting indwelling catheters, instilling sclerosing agents thru the indwelling catheters or placing IPC following a relatively minimally invasive procedure called medical pleuroscopy and Talc poudrage.

Research

One such study is the focus of our discussion today. This study was recently published in the New England Journal of Medicine (3). In this study, 154 patients from 18 centers in the UK were randomized into two groups. One group received 4 grams of Talc thru the IPC as outpatients while the other group received placebo. The patients were followed to look for the rate of pleurodesis, time to pleurodesis and clogging of the catheters among other outcomes. The study shows that the rate of pleurodesis in the talc group was 43% compared with the pleural catheter alone or placebo group was 23 % at 35 days. No significant excess of blockages of the indwelling pleural catheter was noted in the talc group. No significant differences in adverse events were identified either.

Although this study shows a significantly high rate of pleurodesis in the talc group vs. the placebo group, it is not much higher than some of the US and Canadian studies showing pleurodesis rates of around 40 % by just IPC. However, in those studies, the time to pleurodesis was significantly higher, i.e., upwards of 50 days.

The Study from Dr. Maskell's group is the first of its kind opening the door for the outpatient chemical pleurodesis. More studies of different agents delivered in various fashions such as drug-eluting IPCs and installation of various chemicals via IPCs will eventually bring us closer to our target of achieving minimally invasive, rapid, and outpatient pleurodesis with the goal of enabling patients to spend more time in the comfort of their homes surrounded by their families and friends.

References:

1. Jeba et al. *Indian J Palliat Care*. 2018 Apr-Jun; 24(2): 184–8.
2. Wahidi et al..*Am J Respir Crit Care Med*. 2017 Apr 15;195(8)
3. Bhatnagar et al. *N Engl J Med*. 2018 Apr 5;378(14):1313-22.



International Conference on Interventional Pulmonology and Hands-on Training Program - IP2018

Organized by – Bangladesh Association for Bronchology and Interventional Pulmonology (BABIP)

Endorsed by - World Association for Bronchology and Interventional Pulmonology (WABIP)

Summary

The 1st international conference on Interventional Pulmonology organized by BABIP is a landmark in the history of Interventional Pulmonology of Bangladesh. Since its birth on 2015, BABIP had arranged scientific conferences each year. But this is the first time when BABIP could arrange a successful and truly international program. Getting the endorsement of WABIP heightened the aristocracy of the event. It was our great privilege to get a mentor Henri Colt, MD, FCCP, FAWM, Emeritus Professor, Respiratory and Critical Care Medicine, University of California, USA who guided, gave valuable advices and unfettered supports and lastly wrote an enchanting message for souvenir that enlightened the participants.

The conference was held on May 13th -14th, 2018 in Bangabandhu International Conference Center (BICC) and Square Hospitals Ltd., Dhaka. On 13th May the conference started at 8.20 am. Professor Mirza Mohammad Hiron, Chairman and Dr. Md. Sayedul Islam, Secretary General of BABIP inaugurated the scientific session. Total 289 delegates from home and abroad participated in the conference. Among them there was specialist and trainee pulmonologists, internists, thoracic surgeons, pediatric pulmonologists, intensivists and respiratory nurses.



Participants at a glance



Professor Mirza Mohammad Hiron



Dr. Md. Aminul Islam

Total 8 faculties from Japan, UK, Thailand and India along with local faculties took part in the scientific program. Especially the presence of Professor Hideo Saka, Secretary General of WABIP increased the elegance of the program. Other faculties were Dr. Jamsak Tscheikuna, Associate Professor, Respiratory Medicine, Mahidol University, Thailand; Dr. Kedar Hibare, Interventional Pulmonologist, Narayana Health, India and Chair, WABIP Social Media Committee; Dr. Sushmita Roychoudhury, Interventional Pulmonologist, Apollo Glenegels Hospital, Kolkata; Dr. Bala Raju Tadikonda, India; Dr. Gella Vishwanath, India; Dr. Kanumuri Sreenivasa Rao, India; Dr. Gopala Krishna Mallugari, India; Dr. Md. Sayedul Islam, Associate Professor, Respiratory Medicine, National Institute of Diseases of the Chest and Hospital (NIDCH), Bangladesh and WABIP Regent for Bangladesh; Dr. Nirmal Kanti Sarkar, Consultant, Respiratory Medicine, NIDCH, Bangladesh; Dr. Fazle Rabbi Mohammed, Associate Consultant, Respiratory Medicine, Square Hospital, Bangladesh; Dr. Raihan Rabbani, Consultant, ICU, Square Hospital, Bangladesh; Dr. Md. Khairul Anam, Associate Professor, Respiratory Medicine, Shaheed Suhrawardy Medical College, Bangladesh and Dr. Md. Aminul Islam, Associate Professor, Respiratory Medicine, Dhaka medical college, Bangladesh. The aim of the conference was to disseminate and exchange of knowledge on basics and advances of Interventional Pulmonology among the participants as well as conduct an effective hands-on workshop.



Faculty and Organizers

Day-1, Session-1

The scientific session started with a lecture of Dr. Nirmal Kanti Sarkar on “Fiberoptic Bronchoscopy- How I do it”. His discussion included details of step-by-step procedure, patient preparation, segmental anatomy, complications during bronchoscopy and a video presentation. Dr. Fazle Rabbi Mohammed spoke on “Bronchoscopic sample collection” which covered BAL, brush, biopsy technique and transbronchial lung biopsy. Dr. Md. Khairul Anam focused on different aspects and scopes of bronchoscopy in ICU. Dr. Gella Vishwanath nicely illuminated on “Bronchoscopic management of haemoptysis”.



Pictured left to right: Dr. Nirmal Kanti Sarkar, Dr. Fazle Rabbi Mohammed, Dr. Md. Khairul Anam and Dr. Gella Vishwanath

Day-1, Session-2

This session started by the lecture of Dr. Md. Sayedul Islam on “Interventional Pulmonology: past, present and future” – a very colorful lecture where he depicted the history of interventional pulmonology, scopes of IP in respiratory medicine, and recent advancement in this field. The state-of-the-art lecture by Professor Hideo Saka was on “Bronchoscopic diagnosis of peripheral pulmonary nodule” for which audiences were eagerly waiting. He discussed the details of diagnostic approaches, different modalities, thin and ultrathin bronchoscope in a very easy way. The audience warmly applauded his discussion.



Professor Hideo Saka



Dr. Md. Sayedul Islam

Day-1, Session-3

Dr. Md. Aminul Islam told on “8th TNM classification of lung cancer” with changes from previous 7th staging. Dr. Gopala Krishna Mallugari spoke on “cTBNA - How I do it and it’s relevance in the era of EBUS” a very important topic especially for our country where EBUS not readily available and costly one. Dr. Sushmita Roychoudhury gave a beautiful lecture on “EBUS – Basics”. She discussed in an easy way the details of EBUS procedure. Next topic was by Dr. Kedar Hibare on “EBUS – Stretching boundaries” a dynamic lecture where he stretched boundaries and just mesmerized the audience by his very nice discussion on details of EBUS.



Pictured left to right: Dr. Md. Aminul Islam, Dr. Gopala Krishna Mallugari, Dr. Sushmita Roychoudhury and Dr. Kedar Hibare

Day-1, Session-4

Dr. Jamsak Tscheikuna gave a wonderful lecture on “Rigid Bronchoscopy – How I do it” which covered approaches, scopes, advantages and importance to learn rigid bronchoscopy for an interventional pulmonologist along with fiberscope. Dr. Kanumuri Sreenivasa Rao told on “Medical Thoracoscopy” and discussed details of procedure and shared his vast experience with audience showing several cases. Dr. Raihan Rabbani discussed on “Percutaneous Tracheostomy” sharing his ICU experience, how and when to do. Dr. Bala Raju Tadikonda closed the first day session by sharing his long and challenging experiences on “Bronchoscopic foreign body removal in pediatric patients” – a mind blowing discussion indeed.



Pictured from left to right: Dr. Jamsak Tscheikuna, Dr. Kanumuri Sreenivasa Rao, Dr. Raihan Rabbani and Dr. Bala Raju Tadikonda

Day-2, Session-1

This session started with another vibrant lecture by Professor Hideo Saka on “Cryoprocures in Interventional Pulmonology”. His discussion covered in-depth of cryoprocure in different lung lesion. Dr. Gella discussed on application of heat in different lung pathologies in his lecture “Fire in Interventional Pulmonology – APC, electrocautery and laser”. Dr. Fazle Rabbi Mohammed briefly discussed on “Baloon bronchoplasty”.



Professor Hideo Saka



Panelists on stage

Day-2, Session-2

Dr. Gopal Krishna Mallugari started this session with basics of “Airway stenting” and shared his experience. Dr. Kedar gave another brilliant lecture on “Next generation of airway stents” which included conventional as well as 3D and biodegradable stent and future aspects in this field. Dr. Bala Raju highlighted on application of “Bronchial Thermoplasty” in asthma management. The lecture session was concluded by Dr. Sushmita Roychoudhury focusing on – “Year in review – Interventional Pulmonology”.

Hands-on Training program

On 2nd day of program, a very well formatted hands-on training program was arranged at Square Hospitals Ltd. Total 62 registered participants took part in the program. There were 9 stations namely Basic bronchoscopy including bronchial anatomy and sample collection, cTBNA, Baloon bronchoplasty, Convex probe EBUS, Radial probe EBUS, Cryo and APC, Rigid bronchoscopy and airway stenting, Percutaneous tracheostomy and Indwelling pleural catheter. Participants were divided into 9 groups with 7 persons in each group. Procedures were done on mannequin and animal cadaver. The instructors were full of energy to teach and the learners were active in learning and got ample time to do all the procedures in each station by themselves.



From left to right: Basic bronchoscopy station, participants at workshop, cryo station, EBUS-TBNA station



From left to right: Practicing on animal cadaver, IPC station, cTBNA station, EBUS-TBNA station



From left to right: Workshop at a glance, radial probe EBUS station, balloon bronchoscopy station, rigid bronchoscopy station

Certificates were distributed among the participants. The program was concluded by the Chairperson and Secretary General, BABIP thanking all to make the program a successful one.



Certificate distribution



Photo session with workshop participants and faculty

WABIP ACADEMY- WEBCASTS

The WABIP has started a new education project recently: *THE WABIP ACADEMY*. The WABIP Academy will provide free online webcasts with new and hot topics that will interest pulmonologists and interventionalists.

Current webcast topic: **Tissue acquisition for biomarker directed therapy of NSCLC**

Webcast

Small Sample Tissue Acquisition and Processing for Diagnosis and Biomarker-driven Therapy of NSCLC

Welcome to WABIP's free online learning tool to increase knowledge regarding the appropriate selection, acquisition, and processing of cytology and histology samples from patients with known or suspected lung cancer.

Click an icon to begin



Program Description



Purpose



General Learning Objectives



Specific Learning Objectives

[TABLE OF CONTENTS >](#)

Each fictitious clinical case scenario is based on a conglomerate of real patient data. Cases have been modified to avoid any possibility for patient identification and to help meet educational objectives. Any resemblance to real persons, living or deceased, is purely coincidental.

The content for these webcasts has been developed by members of the World Association for Bronchology and Interventional Pulmonology. All content was reviewed by an independent multidisciplinary team of experts. Unless otherwise specified, all content is the property of WABIP.

A collaborative project with Pfizer Oncology

[Credits >](#)



You can reach these webcasts by using this link: <http://www.wabipacademy.com/webcast/>

Links

www.bronchology.com	Home of the Journal of Bronchology	www.chestnet.org	Interventional Chest/Diagnostic Procedures (IC/DP) NetWork
www.bronchoscopy.org	International educational website for bronchoscopy training with u-tube and facebook interfaces, numerous teaching videos, and step by step testing and assessment tools	www.thoracic.org	American Thoracic Society
www.aabronchology.org	American Association for Bronchology and Interventional Pulmonology (AABIP)	www.ctsnet.org	The leading online resource of educational and scientific research information for cardiothoracic surgeons.
www.eabip.org	European Association for Bronchology and Interventional Pulmonology	www.jrs.or.jp	The Japanese Respiratory Society
		sites.google.com/site/asendoscopiarespiratoria/	Asociación Sudamericana de Endoscopia Respiratoria

UPCOMING EVENTS

Pulmo Delta 7th Annual Delta Conference of ESCT

When: October 4-6, 2018

Where: Alexandria -Egypt

Program Director: Prof. Dr. Ramadan Nafea

Program Type: Conference (didactic lectures)

Website: <https://www.wabip.com/events/371-pulmo-delta-2018>

4th Annual Scientific Meeting of the Malaysian Association for Bronchology and Interventional Pulmonology

When: October 12-14, 2018

Where: MALAYSIA

Program Director: DR RAZUL MD NAZRI MD KASSIM

Program Type: Hands-on workshop, Conference (didactic lectures)

Website: <http://www.mabip.com>

Fifth Annual Percutaneous Tracheostomy and Advanced Airway Cadaver Course

When: October 22, 2018

Where: MISTC Lab, The Johns Hopkins Hospital, Baltimore, MD

Program Director: Hans Lee, MD

Program Type: Hands-on workshop, Conference (didactic lectures)

Website: <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=13574>

Advanced Bronchoscopy Course (Egypt)

When: October 25-26, 2018

Where: Steigenberger Hotel El Tahrir Cairo

Program Director: Prof. Emad Korraa

Program Type: Hands-on workshop

Website: <https://www.wabip.com/events/384-advanced-bronchoscopy-course-organized-egypt>

UPCOMING EVENTS

Amrita Bronchology & Interventional Pulmonology 2018

When: October 27-28, 2018

Where: Amrita Institute Of Medical Sciences, Kochi, India

Program Director: Dr. Arvind Perathur & Dr. Tinku Joseph

Program Type: Educational seminar (postgraduate may include physicians in practice and trainees), Hands-on workshop, Conference (didactic lectures)

Website: <http://www.abip.co.in/>

IX Congreso Paraguayo de Neumologia

When: October 31 - November 3, 2018

Where: Asuncion, Paraguay

Program Director: Domingo Perez Bejarano, M.D.

Program Type: Hands-on workshop, Conference (didactic lectures)

Website: <http://www.congresoneumo.com.py/>

Ninth Annual Evaluation and Management of Pleural Disease

When: January 21-22, 2019

Where: The Johns Hopkins Hospital, Baltimore, MD

Program Director: David Feller-Kopman, MD, FCCP

Program Type: Hands-on workshop, Conference (didactic lectures)

Website: <https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=14934>

8th Asian Pacific Congress on Bronchology and Interventional Pulmonology

When: March 27-30, 2019

Where: Gold Coast Convention and Exhibition Centre, Broadbeach QLD 4218, Australia

Program Director: David Fielding, M.D.

Program Type: Hands-on workshop, Conference (didactic lectures)

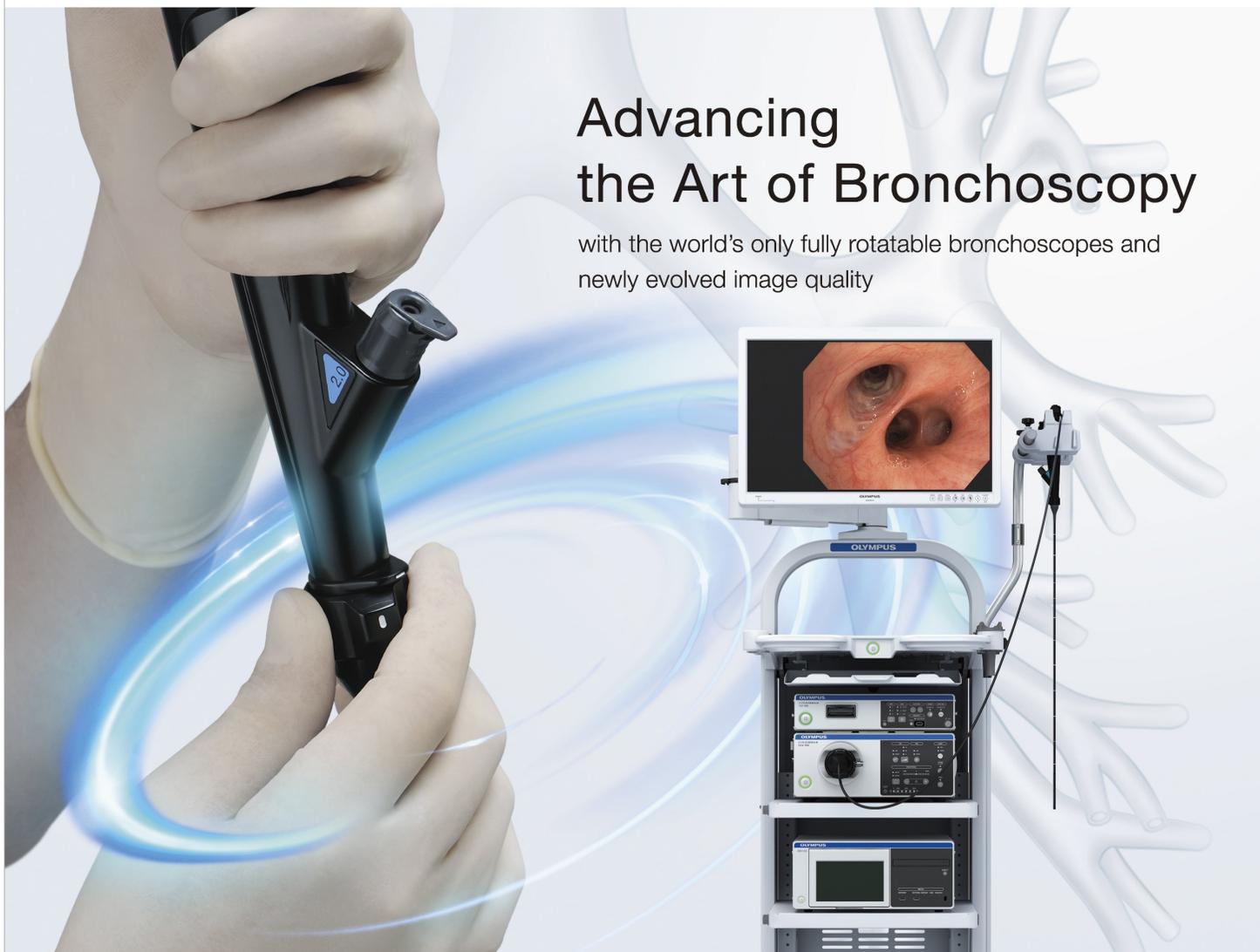
Website: <http://www.apcb2019.com>

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