understood [6;7]. For instance, high PCT values in neonates or patients with medullary carcinoma of the thyroid gland do not affect patient outcome [6]; on the contrary, high PCT values are statistically associated with patient outcome in variety of clinical contexts characterized or not by bacterial or fungal infection [10;11].

The diagnostic and prognostic performances of PCT and CRP are probably not good enough to be used isolated from other clinical and laboratory information [12] . Nevertheless, accumulation of clinical experience and published reports is consistent with a very high negative predictive value of low PCT values [12]. Low (< 0.25 μg/l) PCT values are consistent with absence of severe bacterial infection at least for some clinical contexts[12]. In addition, several clinical trials that still require confirmation with larger cohorts of patients, suggest that PCT could be used to guide the duration of antibiotic therapy is critically ill patients or in patients admitted to the emergency department [12-18].

In summary, although it is too early to assert that information provided by serial PCT measurements could change clinical reasoning on initiation and duration of antibiotic treatment in critically ill patients, recent results suggest that this may be the case.

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ANAESTHESIOLOGY – THE MOST ATTRACTIVE SPECIALITY ALSO IN 20 YEARS

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The development of our speciality has been fast, ever since the famous demonstration of ether anaesthesia by William TG Morton in 1846. We provide the sine qua non for the development of surgery. Although a lot of what we do is common, the development until today has taken varied courses throughout the world. We have one speciality, but the specialist training varies between 0 – 7 years. In some countries, physician anaesthesiologists do mainly anaesthetics, with or without helpers like nurses or technicians, but in others, we are also involved in intensive care medicine, emergency medicine and chronic pain treatment. Anaesthesiologists are also popular as managers and leaders. Our prestige and attractiveness by young colleagues also vary, sometimes leading to lack of manpower.

Both lack of manpower and financial restraints may lead health authorities to create shortcuts, for instance by reducing the duration of training. At the same time, availability of private practices, working time regulations and the general development in society might lead to reduced duty time for doctors. All these developments could lead to impaired quality of services and reduced patient safety. Other specialities also have interests in "our" turf/parts of our speciality like emergency medicine and intensive care medicine. Meanwhile, new teaching methods are also emerging and will be incorporated in our daily practice.

There has always been change/development in medicine. For those countries that experience a shortage with recruitment problems, it might be useful to look to the success factors in the countries where anaesthesiology is popular - eg, in Scandinavia, like in Norway, where we enjoy higher prestige than general surgeons. We believe that the introduction of helicopter emergency medical services, with anaesthesiologists the as "medical problem solvers" in the field has played a role in that. The same is true for our involvement in intensive care and pain medicine. Another factor is that nurse anaesthetists are a natural part of our daily work, but not replacing the doctors (US), but being supervised by us. Hence, doctors often run several theatres simultaneously, or if the case is complicated, there will be two competent persons available at any one time. It is equally important that we are able to demonstrate to the medical students that anaesthesiology is – applied physiology, rewarding for our brains, hands and hearts.

Rather than leaving to others to decide how our future should be, anaesthesiologists must be in the driver's seat to develop our own speciality. This should be done by listening to anaesthesiology organisations in involved countries, assess what works well to improve attractiveness and quality, what development would we like to see concerning supra- or subspecialities, training, etc. Anaesthesiological organisations should work together to outline a roadmap for the future, and we should work with health authorities in a positive, constructive way, taking into account not only the status quo, but also potential positive changes to maintain and improve the quality of the organisation of our speciality,

SURFACTANT THERAPY OF ACUTE AND CHRONIC LUNG DISEASES

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Lung surfactant is a complex of lipids and surfactant-associated proteins which covers the surface of alveoli and the other airways. It is responsible for the mechanics of respiration as well as innate and acquired local immunity. The deficiency and abnormalities of lung surfactant are found in many lung pathologies including RDS in newborns and ARDS in adults, COPD, lung tuberculosis and others.

Lung surfactant formulations showed high efficiency in RDS treatment in newborns. Many attempts were made to test them for ARDS therapy.

Highly-efficient native formulation of lung surfactant based on nanoliposomes, Surfactant-BL, was developed in RSCRCT.

Surfactant-BL had been tested within preclinical and multi-central clinical trials in Russia and was permitted for the treatment of RDS in newborns in 2000 and ARDS in adults in 2003. In December, 2008 Surfactant-BL was approved for use in patients with infiltrative and fibrocavernous lung tuberculosis (TB).

Surfactant-BL has been registered in Moldavia and Byelorussia. By June 2009 Surfactant-BL had been used in over 9,000 newborns, 1,000 adults with ARDS and more than 300 lung TB patients. It is well known that mortality rate in RDS can be as high as 10-20% and mortality rate in ARDS is 50-80%. The use of Surfactant-BL causes a significant decrease in CMV duration, a reduction in complication frequency and a 3-4 fold decrease of mortality rate. Two-month inhalation course of Surfactant-BL (together with standard antituberculosis therapy) to lung TB patients including the patients with multi-drug resistance results in abacillarity in 83% patients (62% in control group), resolution of infiltrates in 100% patients (63% in control group) and cavern closing in 73% patients (41% in control group).

We believe that surfactant therapy will be used not only in above-mentioned patient groups but also in patients with COPD, bronchial asthma and other lung diseases.

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