



### *Dear BSOA Members,*

Thank you for your support and for staying loyal to the BSOA. As a charity we continue to strive to support our commitments to Education and Research. More recently (since 2019), the BSOA Charity has supported the conduct and training of Anaesthesia in low-income countries. That commitment enabled The Holy Spirit Hospital in Makeni, Sierra Leone to remain functional during the first wave of the COVID pandemic. Your yearly contribution aids the support of that function. Unfortunately, the lack of face-to-face conferences or meetings has striped a vital avenue of income. As a charity we welcome donations for the purpose of reaching the above three goals.

We continue to be grateful to our trade/industry sponsors who continue to support webinar education through currently challenging times.

For 2021, webinars are as follows:

<b>19<sup>th</sup> April 2021:</b>	Lectures of Distinction from 2020 (As graded by delegates)	<a href="#">Please click here to view</a>
<b>21<sup>st</sup> June 2021:</b>	Positioning a Patient Prone	<a href="#">Please click here to book</a>
<b>22<sup>nd</sup> June 2021:</b>	Improving Safety in Perioperative Care	<a href="#">Please click here to book</a>
<b>October 2021:</b>	TBA	

We aim to have a registrar prize meeting in November 2021, which has not been confirmed as a face-to-face meeting yet, however every effort is being made to do so.

Our newsletter is evolving into a useful tool for communication. The financial advice column has proved to be very popular and will continue to be a part of this newsletter for the foreseeable future. The Anesthesia Associates are going to be writing a series of articles over the next few newsletters that demonstrate their integration with departments of Anaesthesia in the UK. These articles will be led and written by this group of professionals. Further changes will be announced in due course.

Stay safe out there and enjoy the editorial written by one of our senior trainees at the Royal Orthopaedic Hospital in Birmingham.

*Very best wishes*

**Dr EJ da Silva**

**President of the BSOA**



## Much Ado About Numbing: The Early History of Neuraxial Anaesthesia

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### Cocaine

The *Erythroxylum coca* shrub leaf was chewed by the indigenous population of South America dating back to the Incan Empire. It was documented as early as 1653 that chewing coca leaf eased toothache,(1) yet it took another 200 years for coca leaf to be examined for any sort of therapeutic potential in western medicine.

From 1859-1860, scientists Niemann and Mantegazza were among those who worked to isolate and purify the active substance from coca leaf and named it "cocaine".(2) Once the active component had been isolated, experimentation into its effects became possible.

### Carl Koller

Carl Koller was a budding ophthalmologist at Vienna General Hospital. He joined Sigmund Freud's research team that was experimenting with cocaine as a potential cure for morphine addiction. Koller was given an envelope containing cocaine to use for these experiments, which he placed in his pocket for safe keeping. The envelope leaked a little, then Koller absent-mindedly put his finger to his mouth and noted that his lips went numb.(3) Koller's inadvertent act coupled with his relevant clinical experience in ophthalmology finally heralded the long-anticipated eureka! moment for cocaine.

Koller excitedly applied cocaine solution to the eyes of frogs and found to his delight, that the corneal reflex was absent. Emboldened by these results, Koller went on to successfully perform ophthalmic surgery on a human patient suffering with glaucoma in 1884.(4)

The technique was demonstrated at a conference in Heidelberg (5) and Koller rocketed to scientific stardom. Surgery to the



Carl Koller (Public domain image)

eye, nose and oral cavity was revolutionised almost overnight and there followed a period of intense scientific interest in the new wonder-drug.

### Early Spinal Anaesthesia

The first person to administer a spinal anaesthetic, albeit on a dog, was James Corning in 1885. He injected cocaine between two inferior dorsal vertebrae and noted that within 5 minutes, the dog exhibited incoordination and weakness in its hind quarters which resolved within 4 hours.(6) He attempted to replicate the process in a human subject for the treatment of "an addiction to masturbation, spinal weakness and seminal incontinence", but with less success. The injection was made at T10/11 level and the response to scrubbing the scrotum with a wire brush was recorded!(5) A sensory block was achieved after 20 mins, but the motor effects were not replicated, suggesting an inadvertent epidural injection.

Heinrich Quincke was a German physician whose particular research interest was cerebrospinal fluid. He often performed lumbar punctures on dogs to obtain CSF samples for examination using a bevel point needle known as the "Quincke needle".(7) The famous surgeon August Bier worked in the same laboratory as Quincke and was familiar with the equipment he used, enabling the next step in spinal anaesthesia.

It is widely agreed that the first human spinal anaesthetic was performed by August Bier on his assistant August Hildebrandt in 1898. Hildebrandt first attempted the procedure on Bier but found the needle and "Pravaz" syringe apparatus difficult to manipulate, resulting in cries of pain from Bier and a large volume of CSF on the floor. Bier however, managed a near painless needle insertion and successfully injected 3 c.c. of 0.5% cocaine solution. They were both delighted to observe that profound sensory and motor block were achieved. To be absolutely sure of block adequacy, Bier performed a rigorous set of tests on Hildebrandt including pinching the skin, hitting the legs with a hammer, extinguishing a cigar on the skin of the thigh, ripping out pubic hair followed by a firm squeeze to the testicles! It is uncertain whether the headaches that ensued the following morning are due to



overzealous celebratory drinks or the 1<sup>st</sup> ever post-dural puncture headaches! (5)

### Improving Safety

The rapid rise in the clinical application of both cocaine and spinal anaesthesia inevitably led to case reports of complications and highlighted the limitations of cocaine as a local anaesthetic. The following 100 years were dedicated to improving safety including



*August Bier (public domain image)*

developments in sterile technique (8), safer local anaesthetic agents, patient monitoring (9) and atraumatic spinal needles.(6)

As evidenced by National Audit Project 3 (NAP 3), neuraxial techniques now boast an excellent safety record. I am sure that these early pioneers of spinal anaesthesia would be overjoyed to see the widespread, safe use of the technique that they first described in their pioneering experiments.

### References:

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# Tax Advice for Doctors by Andrew Fenton CTA

## ATT IIT (Dip), AF Tax Solutions LTD



### 1) Summary of main tax measures announced at the Budget on 3 March 2021

#### Personal Tax

The personal allowance will increase to £12,570 and the basic rate limit to £37,700 in 2021/22. These levels will continue up to and including 2025/26. The additional rate threshold (45%) remains at £150,000.

#### Business Tax

##### Corporation Tax rates

The chancellor announced an increase in the rate of corporation tax but not for another two years. For 2021 and 2022 the main rate of corporation tax will remain at 19%.

However, from 1 April 2023, this rate will increase to 25% for companies with profits over £250,000. Companies with profits of £50,000 or less will continue to be taxed at 19%.

Where profits fall between £50,000 - £250,000, the tax rate will be 25% but companies will be able to claim marginal relief.

#### Trading Losses

The period over which trading losses can be carried back is to be temporarily extended from 12 months to 3 years. This applies for trading losses incurred by companies in accounting periods ending between 1 April 2020 – 31 March 2022 (tax years 2020/21 and 2021/22).

#### Capital Allowances

For companies within the charge to corporation tax, increased allowances for expenditure on plant & machinery. For qualifying expenditure incurred from 1 April 2021 to 31 March 2023 companies will be able to claim:

- A super deduction providing a first-year allowance (FYA) of 130% on most new plant and machinery investments that ordinarily qualify for 18% main writing down allowance.
- A FYA of 50% on most new plant & machinery investments that originally qualify for 6% special rate writing down allowances.

### Off Payroll working (IR35)

From 6 April 2021, medium and large private sector clients are responsible for deciding the employment status of workers and whether a contract is within IR35.

Previously, this was the responsibility of the intermediary (e.g. the contractor's PSC). A client is considered medium or large if they meet at least two of the following three conditions:

- They have an annual turnover of more than £10.2m
- They have a balance sheet total of more than £5.1m
- They have more than 50 employees

For every contract agreed with an agency or worker, medium and large clients must issue a Status Determination Statement (SDS), which includes the reasons why an engagement is held to be within (or outside) IR35. The SDS must be passed to the worker as well as any person or organisation the client contracts with. HMRC have provided a tool to assist with this known as the Check Employment Status for Tax (CEST) tool. If CEST is used to determine the employment status of an engagement, HMRC will honour the outcome as long as the correct information has been entered.

Where a contract is within IR35, the entity that pays the intermediary (the fee-payer) should deduct income tax and employee NIC from payments. The fee-payer should also pay employer NIC to HMRC. The reforms only apply to payments made for services provided on or after 6 April 2021.

### 2) Directors Loans

#### *What is a director's loan account?*

This is a way of keeping track of transactions between the director and their company.

Example:

A director buys some stationery for £25 with their personal debit card. This is to be used in the director's company but it was not paid for by the business, therefore the expense does not currently show up in the company accounts. If this transaction is not

recorded in some way, the tax relief for the company on buying the stationery will be lost.

To show this transaction, we will create a “loan” between the director and the company. This will record an expense of £25 in the company accounts (meaning that this cost will be deducted from the company’s profit and tax relief will be given), and as a loan of £25 from the director to the company. The loan will be recorded as a creditor on the company’s balance sheet and will remain there until the company pay £25 back to the director in order to clear the debt.

In the above example we have looked at a director making a purchase on behalf of their company, however transactions of the opposite nature may also occur.

Example:

A director wants to buy a new coffee table for their home. The coffee table costs £250, however the director does not have access to this amount of money in their personal bank account. The company has been doing well and can afford to make the payment from their business bank account. This cost has nothing to do with the business, however the company has now paid £250 for the coffee table on behalf of the director. In this situation a loan is being made from the company to the director. The director is a debtor of the company and owes them £250. This will be recorded on the company’s balance sheet as an asset until the loan has been repaid.

In reality these types of transactions can occur very often, and care must be given to record them clearly and accurately. Over time, several transactions between the director and the company may take place. The director’s loan account (sometimes referred to as a director’s current account) is a way of keeping track of the overall amount owed.

If the company has more than one director then strictly speaking separate accounts should be maintained for each, however it is usually acceptable for spouses and civil partners to operate joint accounts.

#### ***Overdrawn directors loan account***

In the second example the company made a payment of £250 on behalf of the director. If several transactions of this nature take place, the directors loan account may become overdrawn. This is another way of saying that the director owes the company money. This loan will be shown as asset on the company’s balance sheet.

This can cause a number of issues which are often overlooked by directors at the time of making the transactions.

#### ***The Company’s Tax Position (Tax charge)***

If the director’s loan account remains overdrawn at the year end, a tax charge may be applicable.

The director is given nine months from the year end date to clear any outstanding balances. If the outstanding loan is paid off within this period, no tax is payable but a report to HMRC will still be required via the company Corporation Tax Return. Any part of the loan that has not been paid back within nine months and one day of the end of the accounting period in which the loan was made the company will suffer a tax charge.

The tax charge is calculated at 32.5% of the original loan value and is paid via your company’s Corporation Tax Return.

Once the loan has been repaid by the director the s455 charge can be claimed back.

#### ***“Bed & Breakfasting”***

There are anti-avoidance rules to catch out those who attempt to repay the loan balance in full, therefore avoiding a tax charge, only to withdraw the cash from the business again a few days later. The behaviour is commonly referred to as “bed & breakfasting.” This applies when a new loan is taken out within 30 days of the repayment of an earlier loan and the loan is over £5,000.

If you have a large outstanding director’s loan balance, this method of financing your activities can become a huge drain on cash flow. We advise thinking ahead and attempt to try and pay back your directors’ loan within nine months. In situations where this is not possible, ensure that you have factored the tax charge into your cash flow forecast.

#### ***Directors /Shareholder Position***

Rules are in place to prevent the owners of close companies benefiting from cheap financing arrangements.

A close company is defined as UK company with five or fewer directors who either:

- Have control of the company, or
- Together have the rights to receive the greater part of the assets of the company available for distribution.

This definition will apply to majority of small businesses in the UK.

If the shareholder (or a relative) is an employee or a director of the company, and the loans to him and to his associates total more than £10,000 at any time in the year, unless he pays the company interest at the 'official rate', set at 2.25% from 6 April 2020, the shareholder is taxable on a benefit in kind valued at 2.25% of the loan – and the company also has to pay Class 1A National Insurance on the same amount.

If an interest-free loan of £12,000 is outstanding for the whole of the 2020/21 tax year, assuming the official rate of interest remains at 2.25%, the employee would be taxed on a benefit of £270 (£12,000 @ 2.25%) meaning that the employee or director would pay tax of £108 if he pays income tax at 40%.

There is no employee NICs to pay, but the company would pay Class 1A NIC of £37.26 (£270 @ 13.8%). If the employee pays the £270 interest to the company, then no benefit is charged on him or the company. However, it is cheaper to pay the tax and the Class 1A (which in the case of a higher rate taxpayer comes to a total of £145.26) than to pay the interest of £270 on the loan. As a result, it can be much cheaper to borrow from the company if it has the funds available, than from a bank or other commercial lender, or to pay interest on a credit card.

### ***Clearing and overdrawn loan account***

Ways in which a director's loan can be repaid to the business:

- Dividends
- Directors' salary
- Cash payments
- Loan write off

If dividends are used to repay the loan, these must be declared on the director's self-assessment tax return (even if no money is physically withdrawn from the company).

If the loan is unlikely to ever be paid off, it can be formally waived by the company. If the loan is written off, the director is treated as if the company has paid him a dividend of the amount written off. The Director must pay income tax (using the above example of £12,000 and assuming the taxpayer was a higher rate taxpayer) tax of £3,900 is payable on the loan value through their self-assessment Tax Return.

HMRC are also likely to argue the writing off the loan is "earnings" and subject to National Insurance Contributions.

### **3) Dividend Tax Planning**

While extracting profits in the form of dividends can be tax efficient due to the availability of the dividend allowance, the lower rates of tax for dividends and the lack of NICs, there are limitations too. It will not always be possible to pay dividends, particularly in a recession where a company may lack sufficient retained profits from which to pay a dividend.

However, where the company has sufficient retained profits, a popular and tax efficient remuneration strategy is to extract profits as dividends.

For the financial year 2020, the rate of Corporation Tax (at 19%) is less than the basic rate of income tax (at 20%). Consequently, the tax payable by a company is less than that payable by an individual taxpayer, regardless of whether they pay tax at the basic, higher or additional rate taxpayer.

The rate of corporation tax is to remain at 19% for the financial year 2021.

A dividend is a distribution of the company's profits to its shareholders.

Dividends are paid out of after-tax profits, and it is important to be sure that the company has sufficient retained profits after paying its Corporation Tax to cover the dividend proposed – these profits are referred to as 'distributable profits'.

Dividends must be paid in proportion to shareholdings. To preserve an element of flexibility to tailor dividend payments to the circumstances of the individual, an alphabet share structure may be appropriate (**see Alphabet Share Structure**).

Dividends are treated as the top slice of income and are taxed at the appropriate dividend tax rate for the band in which the taxable dividend income falls. For 2020/21, dividend income is taxed at 7.5% to the extent to which it falls within the basic rate band, at 32.5% to the extent to which it falls within the higher rate band, and at 38.1% to the extent that it falls within the additional rate band.

### **Alphabet Share Structure**

As well as the need to have sufficient retained profits from which to pay a dividend, dividends can only be



paid out in proportion to shareholdings and care needs to be taken when paying dividends to see that all shareholders get their fair share. For example, if a company has 100 shares, with 40 held by Mr A and 60 by Mr B, and declares a dividend of £100, the dividend should be paid such that £40 is paid to Mr A and £60 to Mr B.

Sometimes this is not what is required and the requirement to pay dividends in proportion to shareholdings may limit the flexibility to pay dividends in a tax efficient manner. For example, consider a family company where the Doctor and her spouse own 50 shares each. If the Doctor has another job that makes her a higher rate taxpayer, and the husband has no other income, once the wife's dividend allowance has been used up, it would be sensible from a tax planning perspective for the dividends to go to the husband, at least up to the basic rate limit. If the shares are held equally, the only way to do this is for the wife to waive her entitlement to her dividend (but there are conditions that must be met for this to be successful).

However, there is a way around this dilemma and this is to have an alphabet share structure. Under an alphabet share structure, the shares are classified as 'A' shares, 'B' shares, etc. The shareholdings could be arranged such that the husband holds 'A' shares and the wife holds 'B' shares. With this structure in place it is possible to declare different dividends for each class of share, or to declare a dividend only for one class of share, and in this way, tailor the dividends received by each person.

So, for example, in the above scenario, if the company wanted to pay a dividend of £20,000 in 2020/21, it may wish to declare a dividend of £18,000 payable in respect of the A shares and a dividend of £2,000 in respect of the B shares.

This would enable the wife to utilise her dividend allowance, the husband to utilise his dividend allowance and the remaining £16,000 of dividends to be taxed at 7.5%, giving rise to a combined tax bill of £1,200 (£16,000 @ 7.5%). If the dividend were paid equally, so each spouse received £10,000, the combined tax bill would be £3,200 ((£8,000 @ 7.5%) + (£8,000 @ 32.5%).

Adopting an alphabet share structure in this case saves the couple tax of £2k!

For further information or to discuss your tax affairs please contact Andrew Fenton (AF Tax Solutions Ltd) on 07775 503475 or email [andrew@aftax.co.uk](mailto:andrew@aftax.co.uk).

Andrew is a Chartered Tax Adviser (and a former Inspector of Taxes with HMRC) and has many years of experience in dealing with the tax affairs of medical professionals.



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# Leading the Proning service for ventilated patients during the Covid-19 Pandemic at a Central teaching Hospital: By the Anaesthesia Associates, University Hospitals Birmingham.

*Brennan R, Campbell H, Hingley J, Miah S, Prins N, Smith A.*

## **Introduction**

In the United Kingdom, a few Departments of Anaesthesia have harnessed the abilities of Anaesthesia Associates, as part of a team approach to increase service provision. Benefits are demonstrable on both a national and local scale. Initially introduced as Physicians' Assistant (Anaesthesia) (PA(A)s) in 2004, in July 2019 PA(A)s the title was formally changed to Anaesthesia Associates (AAs). This assisted with recognising their role in both, anaesthesia and medical associate professions.

The Queen Elizabeth Hospital Birmingham, QEHB had six Anaesthetic associates working during the pandemic. They helped organise, train and lead the proning teams that enabled critical care teams to safely support ventilated patients.

## **Initial development / templates**

Initially the AA's underwent training to deal with the intubated COVID patient safely. Their pre-existing airway management skills were useful in maintaining airway control during proning and de-proning in the intensive care unit (ICU). The size of the team and integration within the anaesthetic department allowed for rapid training and re-deployment for this role.

The training commenced with observation and practice on a mannequin. Concurrently drawn up protocols were corrected and amended following feedback from observations and experiences to minimise excessive variation in methodology. The selected protocol required 6 people for safe patient manoeuvring. This highlighted the need to increase the workforce particularly with the aspiration to develop a 24/7 service.

## **Training the workforce**

Throughout the period multi-disciplinary staff members were recruited to provide the workforce for service delivery. Their training was delivered by the AA team. Their incorporation into teams was swift, secondary to demand. During the first wave of Covid 19, there were teething problems in ensuring adequate staff, as trained staff were subsequently deployed elsewhere. As the number of COVID-19 positive patients rapidly increased, theatre staff were re-deployed and brought their own expertise to

streamline the service, creating trolleys which had all the equipment needed.

Each manoeuvre took approximately 20-30mins with a large proportion of that time being dedicated to patient preparation. This was reduced greatly over time as many of the preparation tasks initially carried out by the ITU nurse could be done by the team.

## **Communication strategy**

Throughout, the patients identified clinically for re-positioning was communicated using a variety of methods. Establishing a consistent method to identify which patients proved difficult. It was often delayed by ward handover, patient instability and variable communication strategies between the different wards. It began with ad-hoc telephone communication, but a variety of other methods were proposed to optimise this process. These included preparation of a white board with a list of patients to be repositioned or written request in the handover notes on the trust computer system. This enabled efficient workload planning by the team.

The patient repositioning was co-ordinated into a daily cycle following the 16:8 hour strategy. This would see patient's prone in the evening for 16 hours and deproned the following morning for 8 hours supine until the cycle could be repeated if needed. This required daily updating to ensure patients were appropriately on this cycle.

There were some outliers, including those prone in an emergency situation, they were then moved into this cycle fairly swiftly. This pattern was also of benefit to the line teams, radiographers etc. who were then able to do most of their work during the day when the patients were supine.

## **Further training of airway leads – multimodal management the patient.**

Many of the patients were unstable and sensitive to repositioning, with de-proning resulting in decompensation. Some required further cardiovascular support whilst others with chest drains or filters required extra vigilance.

To support the AAs with the workload during the first wave, Neuro-surgeons were trained, to stop the



drawing of anaesthetic resources in the ICU setting. Although medically trained, using Neuro-surgeons as airway leads brought its own challenges, due to their unfamiliarity with this environment, critically ill, intubated patients and ventilators. To overcome this, the ICU provided airway trained oversight.

Supervision of the proning team changed throughout the pandemic. Initially an intensivist or anaesthetist was only present upon request by us. This allowed us to get through the work fairly swiftly, although shortly after leaving the patients, a significant number experienced complications. In middle of April, direct Medical oversight was deemed necessary for every procedure to optimise patient physiology. However, finding this oversight proved difficult. During the subsequent waves an anaesthetist was allocated to the proning team.

During the second phase of the pandemic the teams were amended slightly to include ENT surgeons and Maxillofacial surgeons instead on Neurosurgeons, as well as support from the military. Pre and post checklists were also amended as per the experience of the first phase.

### **Statistics and Data analysis**

**During the first wave:** Between the 30<sup>th</sup> March and 6<sup>th</sup> May, 879 proning / de-proning procedures were performed. This data is a combination of that collected by the anaesthesia associate team and data extracted from patient records. Figure 1 shows this data which gives an average of just over 23 manoeuvres a day with the peak on the 10<sup>th</sup> April with a total of 54 cases.

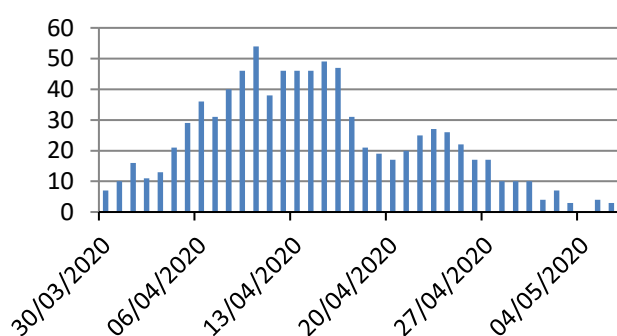


Figure 1

**Second wave:** Between the 5<sup>th</sup> January and 18<sup>th</sup> March, 2195 proning/de-proning procedures were performed. Figure 2 shows this data which gives an average of 30.1 procedures a day with a peak of 58 on 16<sup>th</sup> January.

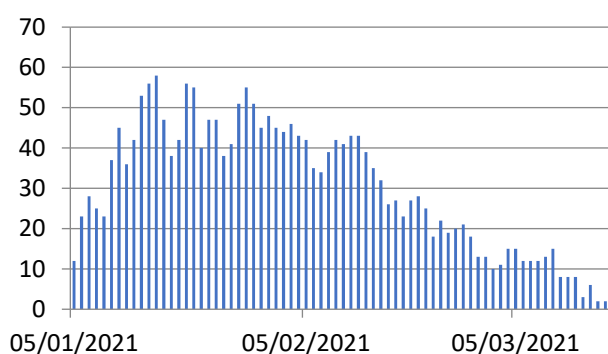


Figure 2

### **Complications, equipment, PPE and exposure**

Complications and side effects have been numerous and varied in this group of patients (Table 1) on the ICU. The commonest respiratory complication was desaturation post procedure, due to apnoea, reduced tidal volume ( $V_t$  or both. Pillows compressing the abdomen or altering the neck position in obese patients contributed to this.

Movement of excess secretions also caused complications, blocking the ET tube/upper airways, either immediately or post manoeuvre. This was usually resolved with suctioning and the loosening of the material within the endotracheal tube with some water. Cardiovascular complications were less common requiring adjustment to their vasopressors. 2 patients experienced PEA's and another temporarily went into fast VT.

Overall, the most common complication of proning was development of pressure sores. Most notable were to the lips and mouth due to the tube tie, and general swelling of the head and neck. Eye-lids were also often swollen as a result of multiple cycles of proning, with corneal abrasions noted as well. Other sores noted included: abdomen, breast, genitalia and toes.

Proning patients, with tracheostomies had complications. The manoeuvre itself proved extremely difficult, tracheostomies were difficult to access. The patients head often ended hyperextended despite additional padding to the chest, and leaks occurred. Other complications included a brachial plexus injury resulting in wrist drop and a dislocated shoulder, plus equipment related problems. **(A full list of complications encountered can be found in Table 1)**

PPE for the proning teams did prove challenging. Firstly, sliding arms under patients resulted in PPE compromise. Multiple techniques were tried to overcome this including gloves taped to the gown and

a top pair changed between patients. Infection control identified contamination between patients with other infections, particularly Extended Spectrum Beta Lactamase so the team was advised on changes in PPE to prevent this.

### **Disclaimer**

With the data collection there may be omission due to manoeuvres performed overnight and lack of documentation. However, every effort has been made to capture the data from backtracking through patient records.

**Table 1: Catalogue of complication/side-effects whilst patients were prone or being prone/deproned**

<p><b><u>Respiratory</u></b></p> <ul style="list-style-type: none"> <li>• Drop in Tidal volume due to positioning</li> <li>• Pillows compress abdomen - low TV</li> <li>• Secretions blocking the ET tube during or following proning.</li> <li>• Saturated HME filter depositing fluid into lungs upon sitting up</li> <li>• Saturated HME filter affecting ventilation</li> <li>• Hole in corrugated tube of catheter mount – leak</li> <li>• Multiple disconnections around flimsy catheter mount systems</li> <li>• Kinking of the ET tube in patients mouth – low TV</li> <li>• Snapped tube tie, had to re-tie in prone position</li> <li>• Nurse cut balloon off ET cuff when changing ET fixation to tube tie</li> <li>• Tracheostomy leak</li> <li>• ET tube requiring repositioning.</li> </ul>	<p><b><u>Cardiovascular</u></b></p> <ul style="list-style-type: none"> <li>• Sinus tachycardia up to 150bpm Fast VT</li> <li>• Sinus bradycardia ~ 40BPM</li> <li>• Hypertension BP &gt;200/120</li> <li>• Hypotension requiring additional support</li> <li>• Transient PEA</li> <li>• Loss of arterial line</li> <li>• Loss of PVC</li> <li>• Kinking of line resulting in failed NA delivery</li> </ul>
<p><b><u>Equipment</u></b></p> <ul style="list-style-type: none"> <li>• Broken bed control requiring patient to be transferred to another bed</li> <li>• Broken touch screen on ventilator</li> <li>• Inbuilt suction catheter mount suction system ejected too far effecting detected TV</li> <li>• Misreading arterial line</li> <li>• Poor/loose connection of arterial line transducers</li> <li>• Deflated mattress making position difficult</li> <li>• ET tube connector stuck on C-circuit after recruitment manoeuvre</li> <li>• Misalignment of pillows upon proning</li> <li>• Faulty capnography (loss of trace despite clear ventilation and sats of 100)</li> </ul>	<p><b><u>Pressure area</u></b></p> <ul style="list-style-type: none"> <li>• Severe swelling to eyes, lips or/and tongue</li> <li>• Tube tie cutting into corners of mouth, lips and tongue - necrosis</li> <li>• Tube tie cutting into back of neck</li> <li>• Dislodging of eye protection – possibly on proning or head repositioning</li> <li>• Pressure marks from ng feed and dressing</li> <li>• Generalised swelling to head</li> <li>• Pressure marks from deflated mattress on ‘swimmers arm’</li> <li>• Various sores on abdomen/nipples</li> <li>• Sores to male genitalia from catheter</li> <li>• Sores on the end of toes</li> </ul>
<p><b><u>Other</u></b></p> <ul style="list-style-type: none"> <li>• Nosebleed upon suctioning secretions</li> <li>• Regurgitation of feed despite previous witnessed aspiration</li> <li>• Retracted NG tube during manoeuvre</li> <li>• Retracted NG tube during repositioning</li> <li>• Bleeding around the line insertion sites</li> <li>• Lack of lacrilube, dermal pads and clamps for ET tube</li> </ul>	<ul style="list-style-type: none"> <li>• Brachial plexus injury – wrist drop</li> <li>• Hyperextension of neck due to deflating mattress</li> <li>• Hyperextension of neck on the prone trache patient</li> <li>• Corneal abrasion following repositioning over night</li> <li>• Patient resisting ventilator requiring further Atracurium</li> </ul>



# BSOA VIRTUAL EVENT SERIES 2021



**B.S.O.A**

*British Society of Orthopaedic Anaesthetists*

7pm - 8.30pm, Monday 21st June

## "POSITIONING A PATIENT PRONE"

### Principals & Physiology

*Dr Glyn Smurthwaite & Dr John Large, Salford*

### Problems & Complications

*Dr Jan Cernovsky, Stanmore, London*

### Teamwork & Equipment

*Dr John Large & Dr Glyn Smurthwaite, Salford*

Session sponsored by  **CARE SURGICAL**

7pm - 8.30pm, Tuesday 22nd June

## "IMPROVING SAFETY IN PERIOPERATIVE CARE"

### Transcutaneous Haemoglobinometry in the Pre-operative setting

*Prof Eric Noll, Strasbourg*

### Continuous Intraoperative Haemoglobin Monitoring

*Prof Julien Pottecher, Strasbourg*

### Cerebral Oximetry & Depth of Anaesthesia

*Dr Basil Matta, Cambridge*

Session sponsored by  **MASIMO**

Each episode of the Virtual Event Series 2021 is **FREE TO ATTEND** and all delegates will be able to access the course on demand for 1 month post event.

Who should attend? Anaesthetists, Surgeons, ODPs, AAs and Allied Healthcare Professionals with an interest in Orthopaedic Anaesthesia.



For more information and to register for the event, please visit  
<https://bsoa.org.uk/conference/bsoa-virtual-event-series-2021/>



# UPCOMING BSOA EVENTS



Following the success of the 2020 webinars, the BSOA Committee is pleased to announce that the Virtual Event Series will be making a comeback in 2021!

Between June and September, we will release three FREE webinars featuring virtual lectures, industry input and live Q&A sessions. Our first two sessions are scheduled for **19.00-20.30 on Monday 21st and Tuesday 22nd June and registration for these events is now live.**

For our first two programmes, we have teamed up with our partners Care Surgical and Masimo to devise an interesting set of lectures from leading experts in the field. Please see below for a breakdown of the webinar themes and dates:

**Positioning a Patient Prone**  
19.00-20.30, Monday 21<sup>st</sup> June 2021  
Sponsored by Care Surgical

**Improving Safety in Perioperative Care**  
19.00-20.30, Tuesday 22<sup>nd</sup> June 2021  
Sponsored by Masimo

The events will be **FREE OF CHARGE** for all attendees and delegates will have **access to the event content for one month after the conference**. If you are a member, you will be able to access the content past this deadline via the members area of the website which we hope will provide some flexibility for those who are not able to join us on the day.

Registration is now open and you can secure your space via <https://bsoa.org.uk/conference/bsoa-virtual-event-series-2021/registration/>

For more information, please visit <https://bsoa.org.uk/conference/bsoa-virtual-event-series-2021/> or contact Lucy at [lucyparkinson@eventmanagementdirect.co.uk](mailto:lucyparkinson@eventmanagementdirect.co.uk).

We look forward to welcoming you to the events in June.

## MEMBER BENEFITS

- ✓ Reduced registration fees for BSOA meetings
- ✓ Access to free webinars
- ✓ BSOA e-newsletters and the opportunity to publish articles in future issues
- ✓ Participation and voting rights at upcoming Executive Committee elections as well as eligibility to nominate and be nominated to the Executive Committee
- ✓ Participation and voting rights at the Annual General Meeting
- ✓ Access to the members-only area on our website including: Documents Library to search documents and Member Forum to join discussions and/or search topics

Questions? Comments? Suggestions? Email us anytime: [info@bsoa.org.uk](mailto:info@bsoa.org.uk)

Dr EJ da Silva  
Editor and President, BSOA Executive Committee