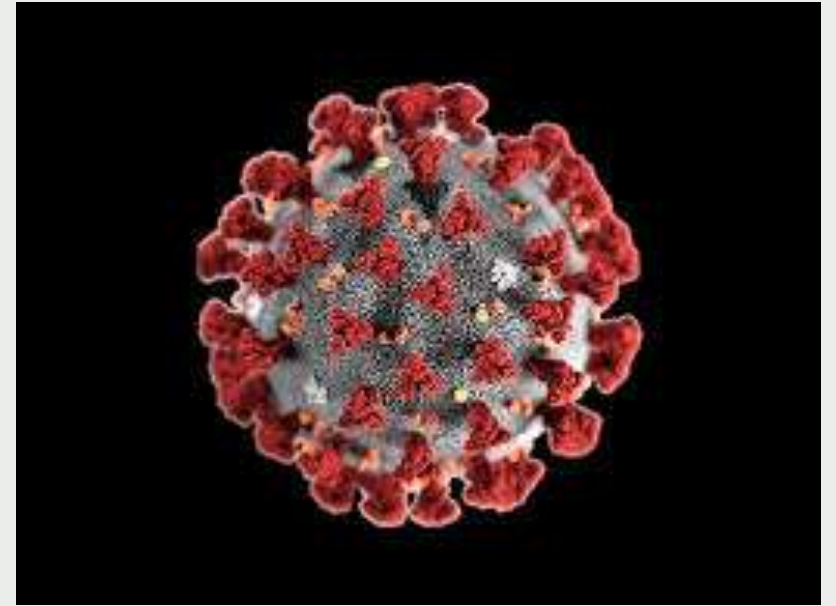


# CHANGES IN FOOT AND ANKLE SURGERY AROUND COVID-19



**MATTHEW WELCK**

CONSULTANT ORTHOPAEDIC SURGEON  
FOOT AND ANKLE SPECIALIST



Consultant Orthopaedic  
Foot and Ankle Surgeon



## Relevant to you!

- **Foot and Ankle Virtual Consultations**
  - *How to perform*
  - *What NOT to miss*
- **Frequent lockdown Injury to be aware of**
- **How to advise patients based on evidence regarding having foot and ankle Trauma and elective surgery**
- **Steroid Injections**







# F&A Virtual Consultations – how to

Article

---

## The Virtual Foot and Ankle Physical Examination

Stephanie K. Eble, BA<sup>1</sup> , Oliver B. Hansen, BA<sup>1</sup> ,  
Scott J. Ellis, MD<sup>1</sup> , and Mark C. Drakos, MD<sup>1</sup>



AMERICAN  
ORTHOPAEDIC  
FOOT & ANKLE  
SOCIETY®

---

Foot & Ankle International®  
1–10  
© The Author(s) 2020  
Article reuse guidelines:  
[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)  
DOI: 10.1177/1071100720941020  
[journals.sagepub.com/home/fai](https://journals.sagepub.com/home/fai)

**Comprehensive technique for virtual foot and ankle examination with documentation checklist. Mainly for F&A surgeon but some useful tips**

**On my website**



- Likely to persist in some capacity.
- Main barrier is physical examination
- This gives you info for patients setup
- Instructions to give to patients.
- Inspection: Instructions
- Palpation: One finger to point, draw on before.
- Movement: Actively or Passively with helper.
- *Strength: Hard. Tiptoes 4/5 power PF, heels 4/5 DF, Family member.*
- NV: Charcot elevation positive. C R

**Table 1.** Patient Guidelines for Appropriate Dress and Instructions for Setting up the Camera.

---

**For patients (intended to be provided *before the telehealth visit*)**

*Recommended Devices:* A portable laptop or tablet is preferable for use during the telehealth visit, as it is stable and the camera can be easily tilted as needed. A mobile phone can also be used, though it may be difficult to position properly unless a family member or friend is available to hold the phone in position.

*Patient Clothing:* Both ankles and knees should be exposed. Wear gym shorts that end at least 3 inches above the knee. Shoes and socks off.

*Examination Space:* 10 to 15 feet of open space should be available to allow you to move for gait analysis.

*Lighting:* The brightest area in the room should be behind the camera, not facing it.

*Patient Position:* Begin seated and with your camera at eye level. During the physical examination you will be asked to reposition yourself and your camera as described below, based on the body part being examined.

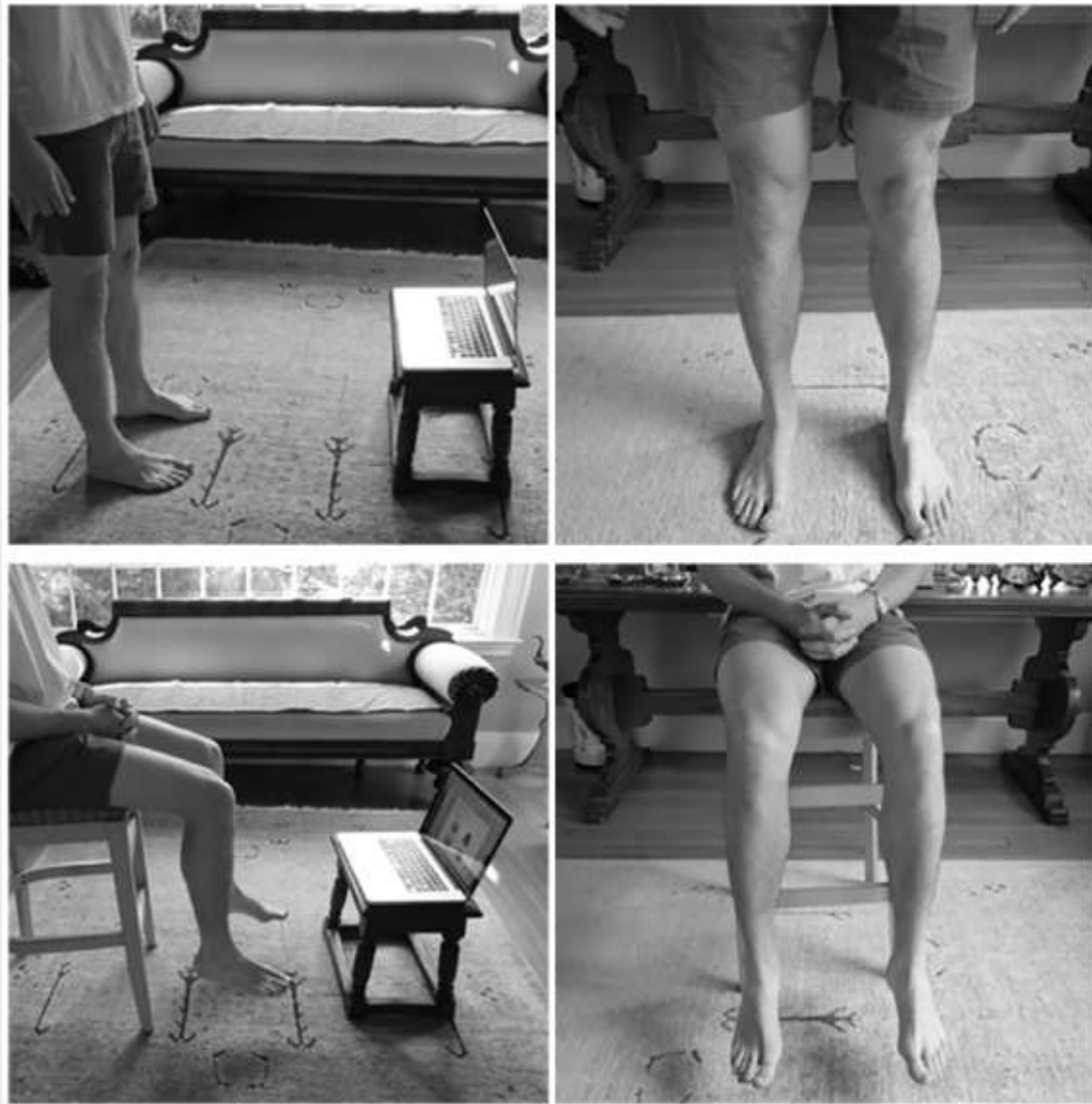
*Camera Repositioning (when instructed to do so during the examination):*

*Standing:* Camera should be placed at shin level with knees to feet visible on the video. You will need 10 feet of space to walk. The camera should also be movable to give an overhead view of the feet.

*Seated:* Sitting on a stool/high chair with feet not touching the floor. The camera should be placed on a table at shin level with knees to feet visible on the video.

*Please test out the positioning and camera images prior to the visit. The required distance and angle of the camera position will vary with the type of device.*

---





**Table 2.** Foot and Ankle Virtual Examination Template, Including a List of Each Examination to Be Performed, a Checklist for Medical Record Documentation, and Corresponding Verbal Instructions for Clinicians to Provide to Patients During the Virtual Examination.

Examination	Documentation	Verbal Instructions for Patient
<b>Vital signs (provided on patient intake form if possible)</b>		
Height and weight	<input type="checkbox"/> Height: _____ <input type="checkbox"/> Weight: _____	
Temperature	<input type="checkbox"/> Temp: _____ <input type="checkbox"/> Location: _____	
Heart rate (HR)	<input type="checkbox"/> HR: _____	
Blood pressure (BP)	<input type="checkbox"/> BP: _____ / _____	
<b>Gait</b>		
Standard walking (heel to toe)	<input type="checkbox"/> Antalgic <input type="checkbox"/> Coxalgic <input type="checkbox"/> Trendelenberg <input type="checkbox"/> Flexed knee <input type="checkbox"/> Stiff knee <input type="checkbox"/> Varus thrust <input type="checkbox"/> Valgus thrust	"Walk directly away from the camera for at least four steps. Turn around and walk directly back toward the camera for at least four steps. Make sure you are in view of the camera while walking."
Toe walking	<input type="checkbox"/> Adequate calf/Achilles strength <input type="checkbox"/> Weakened calf/Achilles	"Walk directly away from the camera on your tip toes for at least four steps. Turn around and walk back towards the camera on your tip toes."
Heel walking	<input type="checkbox"/> Adequate ankle dorsiflexion strength <input type="checkbox"/> Weak ankle dorsiflexion strength	"Walk directly away from the camera on your heels for at least four steps. Then walk back towards the camera on your heels while staying in view of the camera throughout."
<b>Inspection/palpation</b>		
Hindfoot alignment (posterior view)	<input type="checkbox"/> Neutral <input type="checkbox"/> Mild varus <input type="checkbox"/> Severe varus <input type="checkbox"/> Mild valgus <input type="checkbox"/> Severe valgus	"Stand facing away from the camera so that the doctor can see the back of your legs and heels, from your feet to your knees."
AP foot alignment (from above)	<input type="checkbox"/> Neutral <input type="checkbox"/> Mild abduction <input type="checkbox"/> Severe abduction <input type="checkbox"/> Mild adduction <input type="checkbox"/> Severe adduction	"Stand and hold the camera over your feet so that the doctor can see your ankles and feet from above."
Tenderness	<input type="checkbox"/> Locate area of concern	"Point with one finger to the area of maximal tenderness while positioning the camera so that the doctor can see that area."
Skin integrity	<input type="checkbox"/> Dorsal surface integrity <input type="checkbox"/> Plantar surface integrity	"While sitting, raise your foot so that the doctor can see the bottom surface. Then place your foot down and position the camera so that the top surface is visible."
<b>Range of motion</b>		
Dorsiflexion and plantarflexion	Active ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful Passive ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful	"While seated, position the camera so that the doctor can see the side of your foot. The foot being examined should be the one closest to the camera. Bend your knee to a 90-degree angle. First, using your own muscle power, bend your foot as far towards your shin as possible with your toes pointing up, then point your toes as far towards the ground as possible. Now manually manipulate the foot through the same motion, either yourself or with assistance from a family member or friend."
Gastroc tightness (compare to bent knee PF and DF above)	<input type="checkbox"/> Normal tightness <input type="checkbox"/> Mild tightness <input type="checkbox"/> Severe tightness	"Remain seated and perform the same motion as before, but with your knee straight. You may need to reposition the camera for the doctor to see your foot and ankle."

Examination	Documentation	Verbal Instructions for Patient
Inversion and eversion	Active ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful Passive ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful	"Sit with the camera facing the front of your feet and ankles. First, using your own muscle power and trying to keep your toes facing forwards, rotate your foot as far inwards as possible, then as far outwards as possible. Now manually manipulate the foot through the same motion, either yourself or with assistance from a family member or friend."
<b>Strength tests (assisted by an examiner)</b>		
Ankle dorsiflexion strength	Remote Examiner <input type="checkbox"/> Unable <input type="checkbox"/> Very weak <input type="checkbox"/> Somewhat weak <input type="checkbox"/> Symmetric	"To complete the following tests, you will need someone to help provide resistance as you complete the described motions. This will give us a sense of your strength. Position the camera for each exercise so that the doctor can see your feet and ankles." "The examiner will place his/her hands on the top of each foot. The examiner will resist as you attempt to bend your ankles up such that your toes point toward your face, as if you are easing off of the gas pedal. The examiner will test both ankles at the same time and describe the strength as 'very weak,' 'somewhat weak,' or 'same as other side.'"
Ankle plantarflexion strength	Remote Examiner <input type="checkbox"/> Unable <input type="checkbox"/> Very weak <input type="checkbox"/> Somewhat weak <input type="checkbox"/> Symmetric	"The examiner will place his/her hands on the bottom of each foot. The examiner will resist as you attempt to press your feet down, as if you are pressing down on the gas pedal. The examiner will test both legs at the same time and will describe the strength as 'very weak,' 'somewhat weak,' or 'same as other side.'"
Big toe strength	Remote Examiner <input type="checkbox"/> Unable <input type="checkbox"/> Very weak <input type="checkbox"/> Somewhat weak <input type="checkbox"/> Symmetric	"The examiner will place his/her hands on the top of each big toe. The examiner will resist as you attempt to point your big toes toward your face. The examiner will test both big toes at the same time and will describe the strength as 'very weak,' 'somewhat weak,' or 'same as other side.'"
Eversion strength	Remote Examiner <input type="checkbox"/> Unable <input type="checkbox"/> Very weak <input type="checkbox"/> Somewhat weak <input type="checkbox"/> Symmetric	"The examiner will place his/her hands on the outside border of each foot. Resist the examiner as he/she pushes on the outside border of each foot. The examiner will test both legs at the same time and will describe the strength as 'very weak,' 'somewhat weak,' or 'same as other side.'"
Inversion strength	Remote Examiner <input type="checkbox"/> Unable <input type="checkbox"/> Very weak <input type="checkbox"/> Somewhat weak <input type="checkbox"/> Symmetric	"The examiner will place his/her hands on the inside border of each foot. Resist the examiner as he/she pushes on the inside border of each foot. The examiner will test both legs at the same time and will describe the strength as 'very weak,' 'somewhat weak,' or 'same as other side.'"
<b>Circulation</b>		
Foot perfusion (visual)	<input type="checkbox"/> Adequate perfusion visually <input type="checkbox"/> Inadequate perfusion visually	"While seated, turn your foot so that the doctor can see the bottom surface. Then face the top surface of your foot to the camera."
Foot perfusion (temperature)	<input type="checkbox"/> Symmetric <input type="checkbox"/> Cooler <input type="checkbox"/> Hotter	"Does your foot feel the same temperature on both sides?"
Capillary refill	<input type="checkbox"/> <2 seconds <input type="checkbox"/> >2 seconds	"Position the camera so that your doctor can see your toes. Press the soft pad of your big toe or toenail until it turns white. Then, release your thumb and allow it to pink back up. How long did it take to pink back up?"

For future reference only

Examination	Documentation	Verbal Instructions for Patient
Pitting edema	<input type="checkbox"/> None <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe	"Make sure your lower leg is in view of the camera. Using two fingers, press down on the front of your shin just above your ankle."
Calf pain	<input type="checkbox"/> Pain <input type="checkbox"/> No pain	"Squeeze your calf. Does this cause you pain?"
Homan	<input type="checkbox"/> Negative <input type="checkbox"/> Positive	"Use a belt to pull your ankle up as if you are stretching your calf. Does this cause you pain?"
<b>Neuromuscular</b>		
Numbness or tingling	<input type="checkbox"/> Numbness absent <input type="checkbox"/> Tingling absent <input type="checkbox"/> Numbness reported <input type="checkbox"/> Tingling reported	"Do you feel any numbness or tingling in your foot or ankle? If so, point to the area where the sensation occurs. Position the camera so that the doctor can see this area."
Individual nerves:		"We are going to test sensation in some specific locations. Please use your other hand to touch. . . ."
SPN	<input type="checkbox"/> Normal <input type="checkbox"/> Numbness <input type="checkbox"/> Painful touch	" . . . the top of both feet."
DPN	<input type="checkbox"/> Normal <input type="checkbox"/> Numbness <input type="checkbox"/> Painful touch	" . . . the webspace between your big toe and the second toe."
Tibial	<input type="checkbox"/> Normal <input type="checkbox"/> Numbness <input type="checkbox"/> Painful touch	" . . . the bottom center of both feet."
Sural	<input type="checkbox"/> Normal <input type="checkbox"/> Numbness <input type="checkbox"/> Painful touch	" . . . the outside of both feet."
Saphenous	<input type="checkbox"/> Normal <input type="checkbox"/> Numbness <input type="checkbox"/> Painful touch	" . . . the inside of both calves."
<b>Condition-specific tests</b>		
Flatfoot: heel raises	<input type="checkbox"/> Normal <input type="checkbox"/> Heel off ground but no inversion <input type="checkbox"/> No heel off ground	"Stand and position the camera so your lower legs and feet are in the frame and you are facing away from the doctor so that they can see your heels. You should be positioned against a wall and can place your hands on the wall for balance. While standing on both feet, lift up so you are on your toes. Now repeat this exercise standing on one foot, taking the other leg completely off the floor with the knee bent at 90 degrees so that your foot is behind you. Finally, repeat on the other side."
Cavovarus foot: Coleman block test	<input type="checkbox"/> Correction to neutral <input type="checkbox"/> No correction to neutral	"Stand and position the camera so your lower legs and feet are in the frame and you are facing away from the doctor so that they can see your heels. Stand on a stack of magazines or something of similar height such that your heel and the outside of the foot are on top of the stack, and your first, second, and third toes hang freely off the edge of the stack."
Hallux rigidus: Big toe ROM	Active ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful Passive ROM <input type="checkbox"/> Normal ROM <input type="checkbox"/> Limited ROM <input type="checkbox"/> Motion painful	"Position the camera so that your toes are visible while seated. Bend your big toe up and down through its full range of motion. Describe any sensations of pain, clicking, or grinding that may arise while doing this."

**Table 2. (continued)**

Examination	Documentation	Verbal Instructions for Patient
Achilles rupture: Thompson test	<input type="checkbox"/> Normal <input type="checkbox"/> Pathological	"This test will require an assistant. Lie face down on the floor, a couch, or a bed with your knees bent 90 degrees so that your feet are in the air. Position the camera so your lower leg and foot are visible to the doctor. Relax your muscles completely while the assistant squeezes and releases your calf muscles. Do your toes become pointed during squeezing?"





# My practice

**+: Convenient for Patient, cheaper**

**Sometimes screening tool to allow pre consult investigation**

**I see most patients F2F for initial consult: examination e.g stability, reducibility, strength.**

**Some follow ups are now virtual**

**Post ops I see... unless injection etc.**



# Other F&A surgeons experience

## The Oxford Experience of Telemedicine for F&A. Mr Rick Brown

Telephone consultation and then follow up satisfaction survey

265 consultations

Effective clinical decisions in 89% for F/U's and only 69% for New

WL 10% from phone 20% F2F

Patient view of usefulness survey Median score >9/10

4.3% would want only telephone consultation

37.5% either

58.5% rather have F2F

Effective way of providing service but should be part of the pathway to F2F consults.

## Guildford

MDT discussions useful.

Video consult is no substitute for F2F consultation, but can be used as part of the patient pathway



# What not to miss over the phone!

## **Septic Arthritis**

Immunosuppression, DM, Alcoholism, Recent Injection, IVDU

Sudden onset, red, hot, painful joint.

Systemic symptoms.

Needs A&E referral.



# Fractures and Dislocations

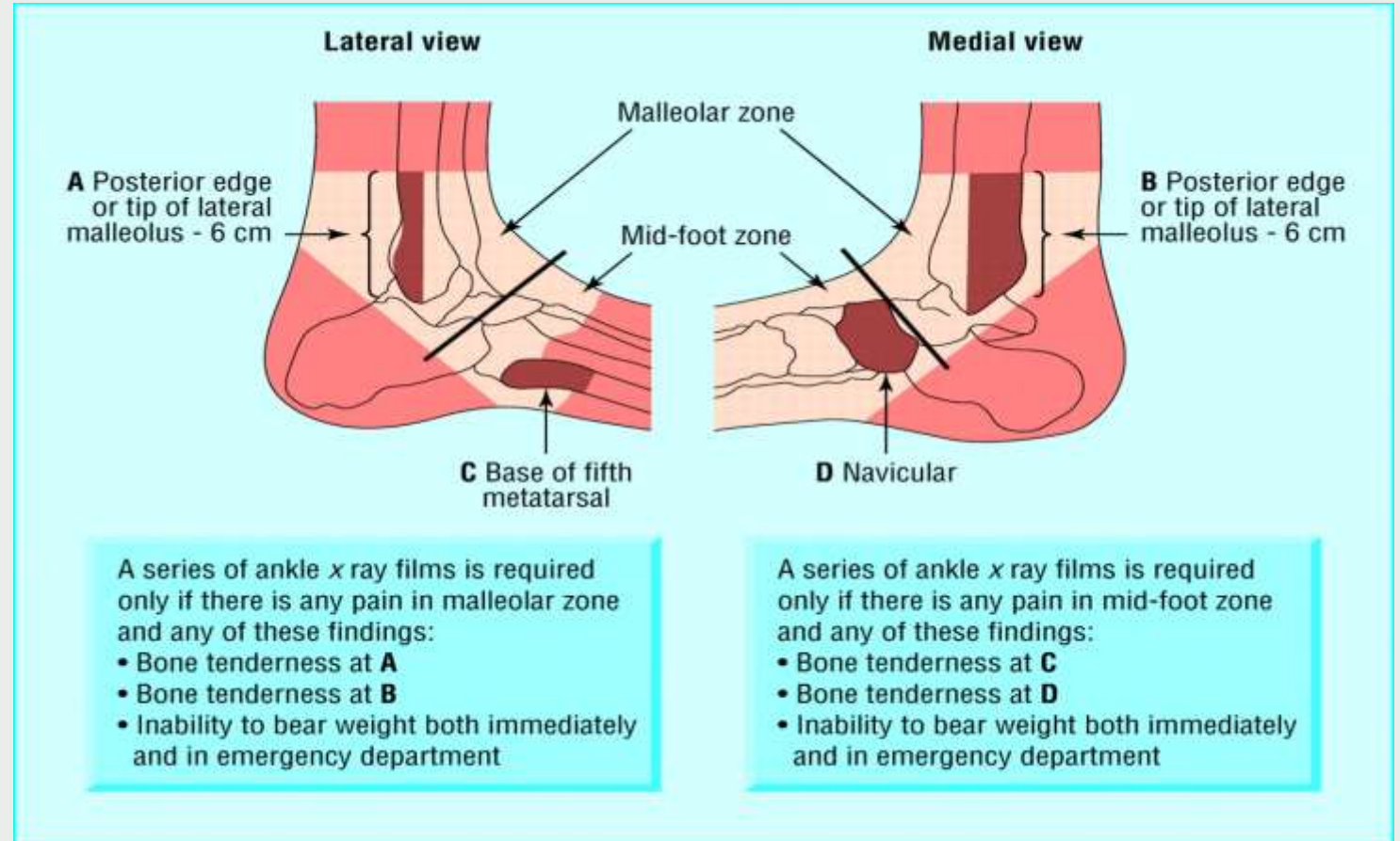
Hx of trauma

Possible low energy/path fracture:

OP, myeloma, PMH Ca

Difficult WB

Ankle, Calc, Lisfranc.



## Ligamentous Injury that may need fixation x 2 recent patients

Lateral ligaments tend to  
require 2 weeks rest, then  
physio (unless elite athlete).

Medial Tenderness should  
prompt referral

Anterior tenderness should  
prompt referral

## Evaluation: Physical Exam

### Palpation

- Direct syndesmosis tenderness

### Special Tests

- External Rotation Test
- Squeeze Test



Image Source: M. Morrey MD





# Tumours

**PMH Ca. Prostate, Breast, Kidney**

**Weight loss**

**Night pain**

**Deep intense pain**

**Mass- recent patient.**

**Lymphadenopathy.**



# TA rupture

**Hx:** audible snap, 'been kicked'. May settle.

**O/E:** unable to SLHR

**Chronic** more difficult as calf squeeze may be normal.

## Sensitivity of tests for acute achilles tendon rupture

Gap	0.73
Ankle of declination	0.88
Calf squeeze	0.96

Simmonds' triad of tests 100% sensitive

**Delay in Rx can cause significant complications, inability to return to sport...**



## Neurological lesion – acute foot drop

- isolated peroneal neuropathy: weakness of foot dorsiflexion and eversion; sensory loss of the anterolateral aspect of the lower leg and the foot dorsum; normal reflexes; no other neurological features. Offer conservative treatment review 4 weeks.
- refer patients with acute bilateral foot drop, one sided foot drop with back pain or fasciculations, or more widespread neuropathy to a neurologist





# Charcot Foot/ DFU.

**Multiple Medico-legal cases**

**DM, reduced sensation**

**May be a history of innocuous or unnoticed trauma.**

**Deformity**

**Swelling**

**Increased heat**

**Redness resolves with elevation.**

**Can lead to severe deformity, ulceration, OM, ultimately amputation.**

**Metatarsal Stress Fracture >10**

**<https://www.youtube.com/watch?v=woB9YpRpUQk>**

**Frequent Lockdown Injury!**







# **COVID-19 Lockdown**

- **More sedentary people are walking every day**
- **More active are outdoor running every day**
- **Increasing incidence of metatarsal stress fractures.**

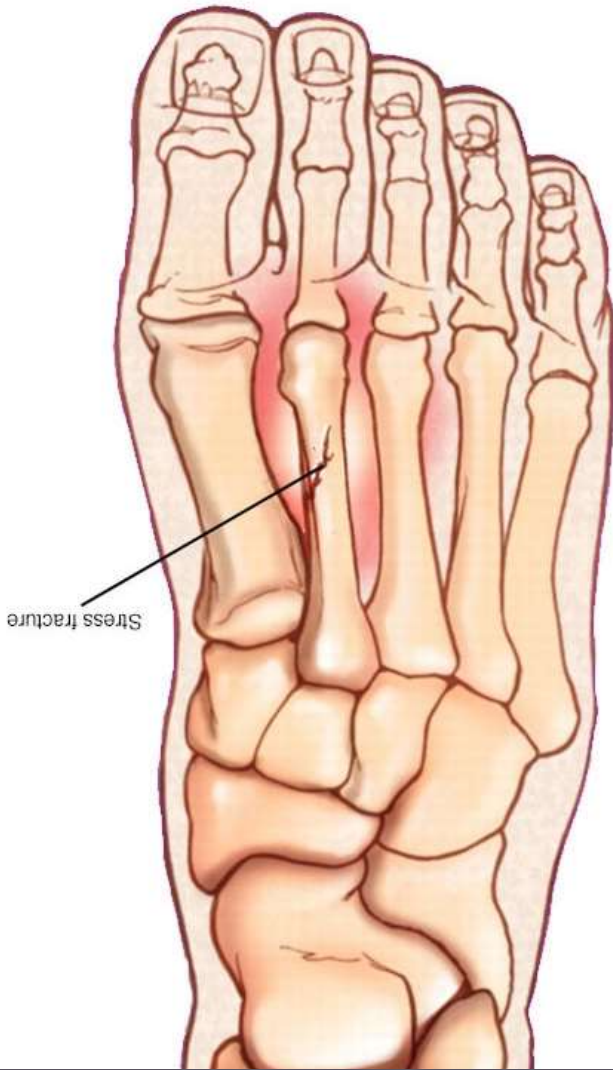
# What they are?

Aka 'March fractures'

Cracks in metatarsal bones due to increased stress

2/3 > 4/5. Tend to heal better. Bending forces.

Shaft/neck > Base. Tend to heal better



# Why they happen...

1

Bone damage with not enough time to heal

2

Bone fatigue:

- Normal bone with excess demand on it and not enough time to repair. \*

3

Bone Insufficiency:

- Normal demand on weakened bone

# Who they affect...

- **High impact athletes**

runners. Jumpers, dancers

- **Unaccustomed exercise**

frequency, change footwear (barefoot), old footwear

- **High heels**

- **Female Athletic triad**

- Athletes +

- Hormonal imbalance, nutritional imbalance (eg Vit D), low bone density.

- Low bone density



# Presentation

Pain at top or bottom of  
foot on WB

Painful to press

Swelling







# Investigation

- XR often normal for first few weeks
- CT – can still be negative
- MRI
- Bone scan





# Treatment

- Reduce WB. Initial NWB
- Rigid shoe/Boot WBAT upto 6 weeks



- Surgery
- Drilling, bone graft, plates/screws.



## **How to advise patients regarding Trauma and Elective Foot and Ankle Surgery**

**Pt driven neglect definitely being seen.**

**UK Foot & Ankle COVID-19 National Audit (UK-FALCON)**

**Mangwani, Malhotra, Mason, BOFAS outcomes & sci comm.**

**Retrospective data 13<sup>th</sup> Jan to 31<sup>st</sup> July 2020 + Prospective data  
1<sup>st</sup> Sep to 30<sup>th</sup> Nov 2020. UK national lockdown on 23<sup>rd</sup> March 2020**

**Early reports at BOFAS webinar.**

# Data capture

**Number of Covid positive patients in F&A surgery (treated in OT)**

**Regional differences**

**Outcome of Covid positive patients –**

**Demographics**

**length of stay**

**Complications esp. infection**

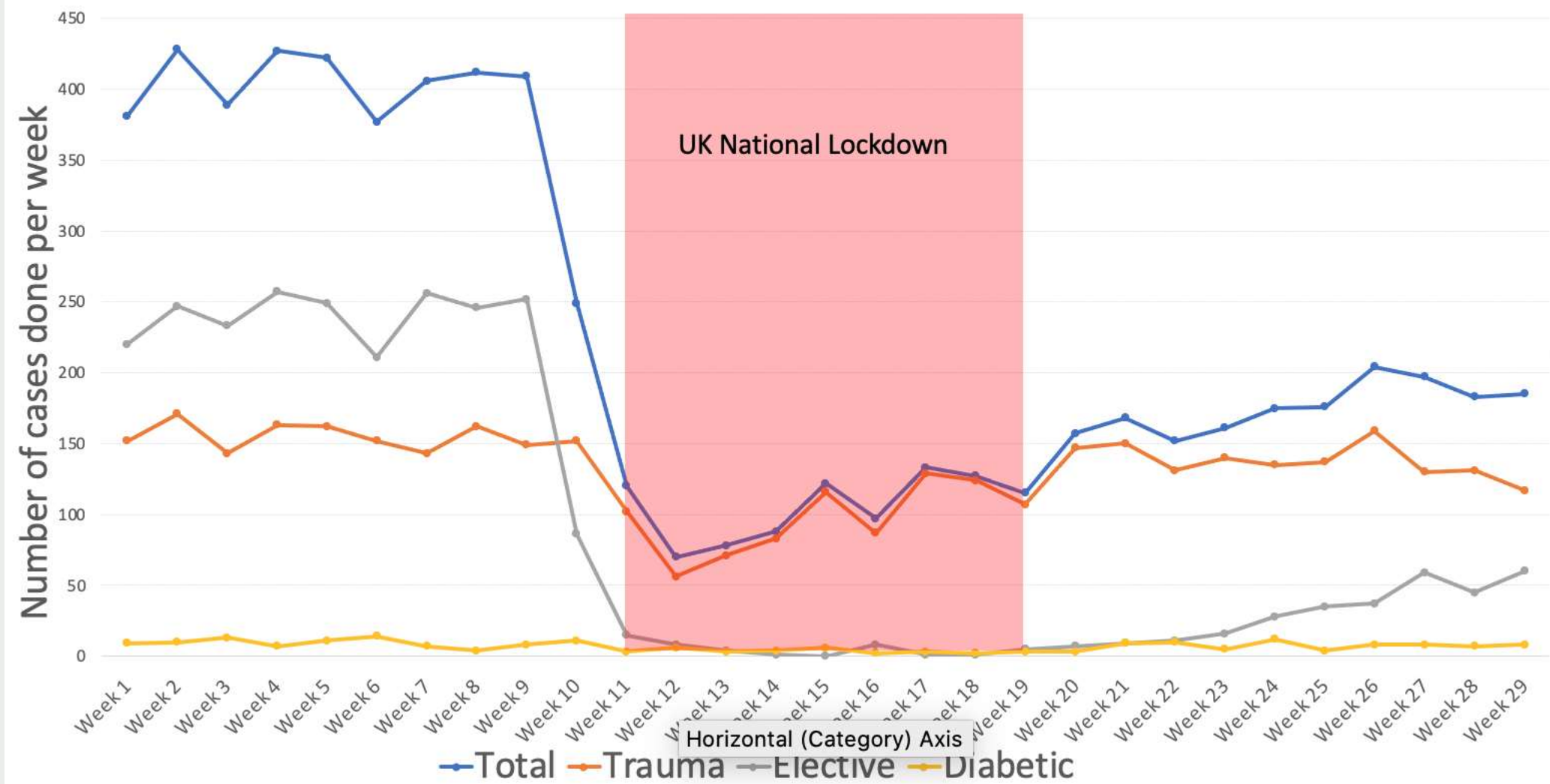
**30 day mortality**



42 units (over 6600 patients) contributed data from England, Wales, Scotland and Northern Ireland

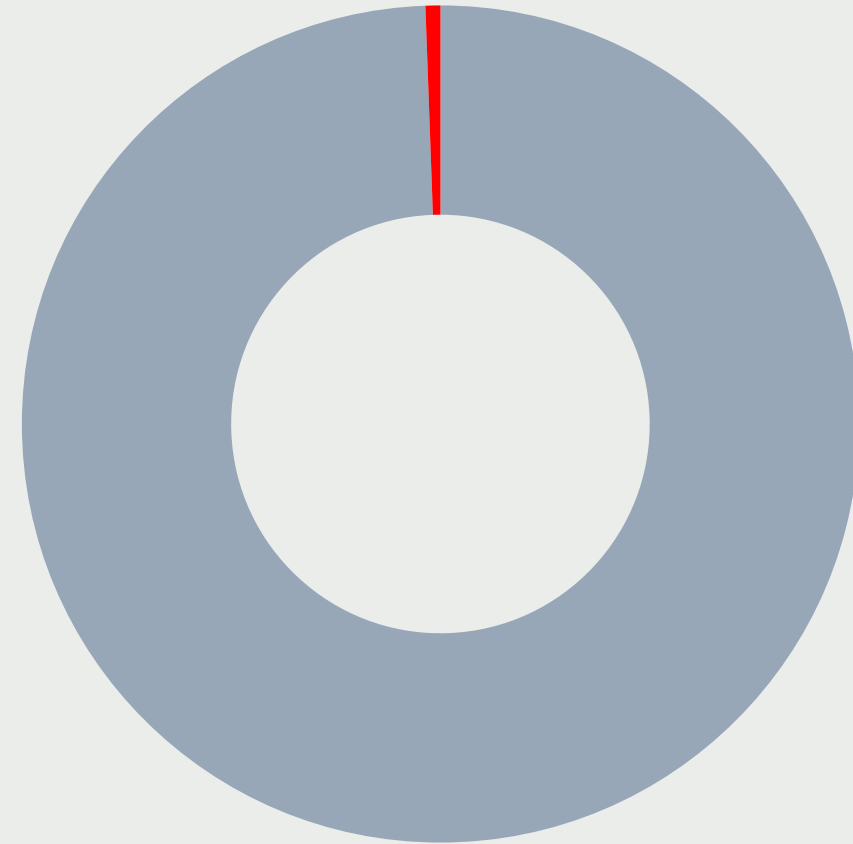


Foot & Ankle Activity Across the UK between 13th Jan 2020 and 31st July 2020



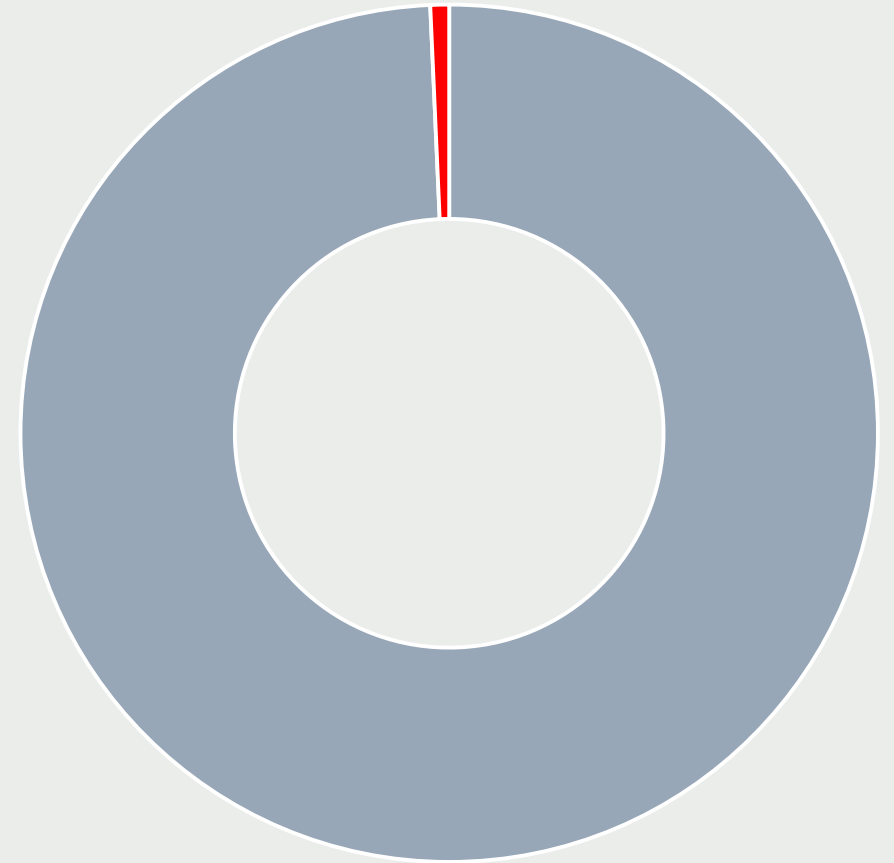
**Covid positive in all  
F&A patients**

0.52%



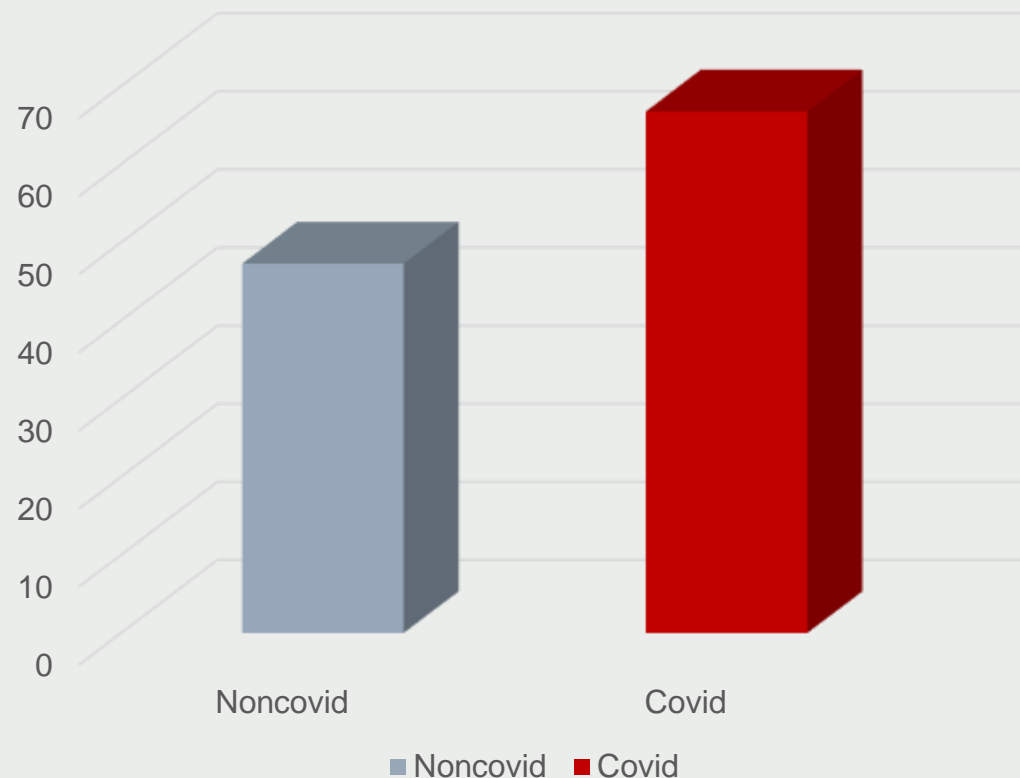
# Covid in F&A trauma patients

Incidence of Covid in F&A Trauma  
patients 0.78%

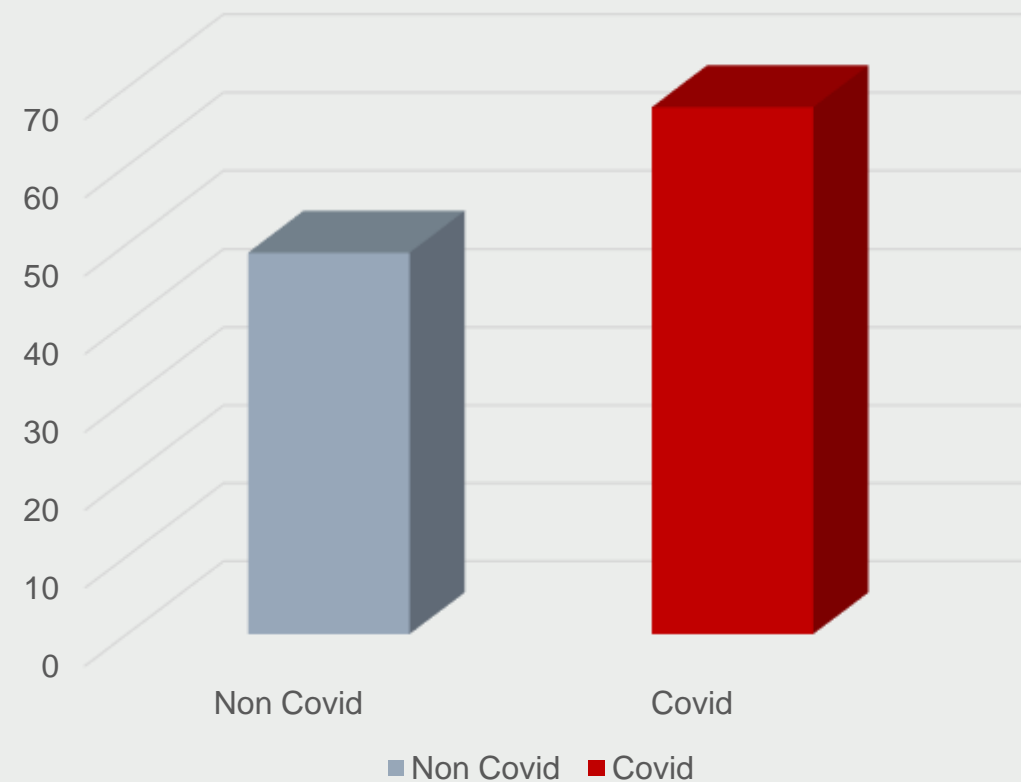


# Age- Covid Vs. NonCovid

Mean Age Trauma

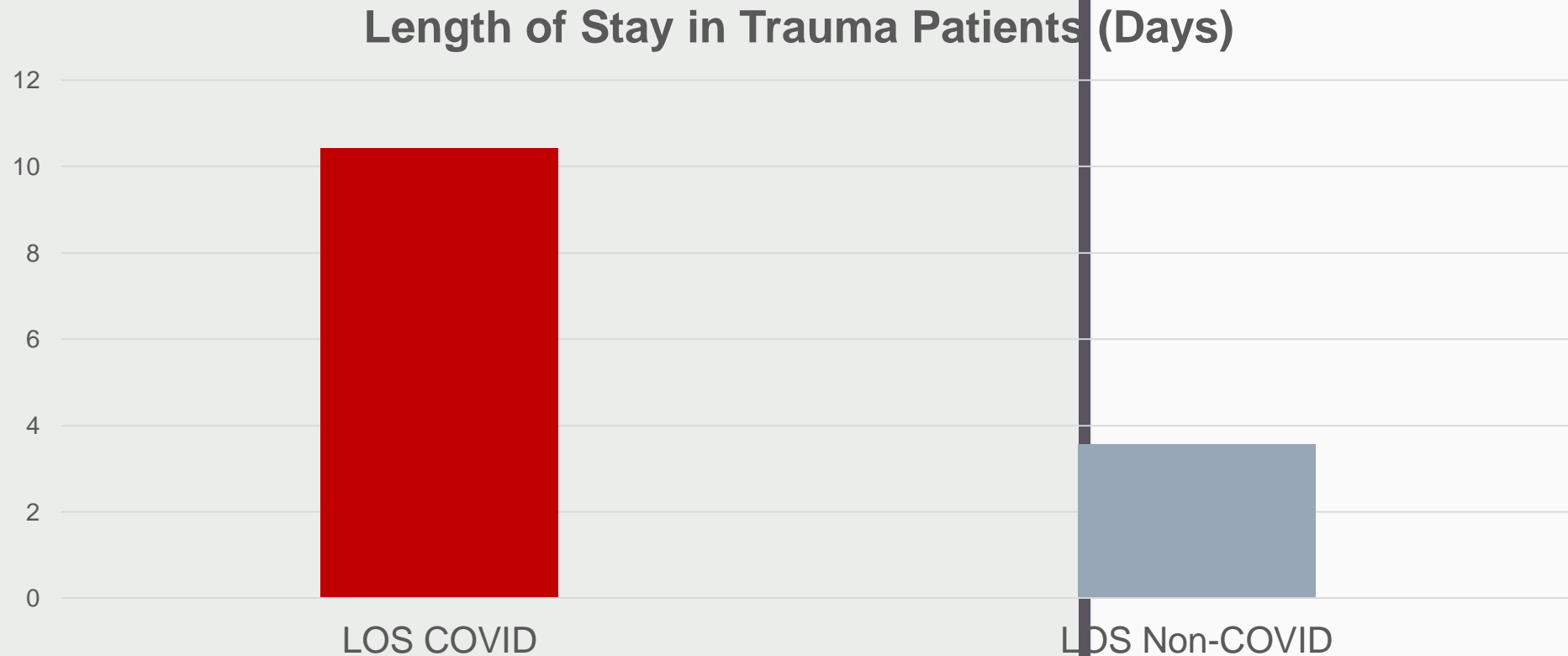


Mean age Total



Statistically significant difference between Covid and Noncovid patients

# COVID STATUS AND LOS



Mean length of stay in COVID +ve F&A trauma patients was significantly higher

# Mortality

**Mortality in trauma patient with covid-19 17.9%**

**Mortality in DFU 75%**

**Mortality in elective foot and ankle. 33% (3 patients contracted covid. All urgent patients)**

**No patients died of COVID since lockdown (elective services have resumed)**





# Summary

**Covid incidence low in F&A surgery patients including trauma**

**Significantly high LoS and mortality in Covid positive patients**



## How to advise patients regarding Elective and Trauma surgery

Unlikely to catch but if you do high mortality.

So:

- Stratify Urgency of Op
- Stratify Risk of Patient.
- Counsel Accordingly.

Tools I use

<u>Category - Royal College of Surgeons Guidance</u>	<u>Priority Status</u>	<u>Priority Option on ICE request form</u>
Category 2	High Priority (surgery within 4 weeks)	Urgent (ideally surgery within 4 weeks)
Category 3	Medium Priority (surgery within 3 months)	Soonest (ideally surgery within 3 months)
Category 4	Low Priority (surgery can be delayed for more than 3 months) <i>*if unable to date earlier*</i>	Routine (surgery can be delayed for more than 3 months) <i>*if unable to date earlier*</i>

# URGENCY OF OP

# RISK ASSESSMENT

## Patient risk factors

Consultants should clearly document the patient risk factor/s (low/moderate/high) and the rationale for this risk rating on the booking form and in the OPD patients notes.

Any patients with one or more high risk indicators or two or more moderate risk indicators are managed as high risk. Patients with one moderate risk indicator are managed as moderate risk.

Moderate indicators of risk	High indicators of risk
<p>People at moderate risk include people who:</p> <ul style="list-style-type: none"><li>• are 70 or older</li><li>• have a lung condition that's not severe (such as asthma, COPD, emphysema or bronchitis)</li><li>• have heart disease (such as heart failure)</li><li>• have diabetes</li><li>• have chronic kidney disease</li><li>• have liver disease (such as hepatitis)</li><li>• have a condition affecting the brain or nerves (such as Parkinson's disease, motor neurone disease, multiple sclerosis or cerebral palsy)</li><li>• have a condition that means they have a high risk of getting infections</li><li>• are taking medicine that can affect the immune system (such as low doses of steroids)</li><li>• are very obese (a BMI of 40 or above)</li><li>• are pregnant – see <a href="#">advice about pregnancy and coronavirus</a></li></ul>	<p>People at high risk include people who:</p> <ul style="list-style-type: none"><li>• have had an organ transplant</li><li>• are having chemotherapy or antibody treatment for cancer, including immunotherapy</li><li>• having an intense course of radiotherapy (radical radiotherapy) for lung cancer</li><li>• are having targeted cancer treatments that can affect the immune system (such as protein kinase inhibitors or PARP inhibitors)</li><li>• have blood or bone marrow cancer (such as leukaemia, lymphoma or myeloma)</li><li>• have had a bone marrow or stem cell transplant in the past 6 months, or are still taking immunosuppressant medicine</li><li>• have been told by a doctor they have a severe lung condition (such as cystic fibrosis, severe asthma or severe COPD)</li><li>• have a condition that means they have a very high risk of getting infections (such as SCID or sickle cell)</li><li>• are taking medicine that makes them much more likely to get infections (such as high doses of steroids or immunosuppressant medicine)</li><li>• have a serious heart condition and are pregnant</li></ul>

***Any one high patient risk factor***

14 days self-isolation

***More than one moderate patient risk factor***

14 days self-isolation

***Single moderate patient risk factor only***

Risk assessment of patient  
Social distancing for 11 days and self-isolation for 3 days following COVID swab

***None of the above***

Social distancing for 11 days, 3 days self-isolation after COVID-19 swab test

# Consent

**Multiple documents available**

**RCSEng, BOA, individual trusts.**

**Links on my website.**



Over the past two months, the UK has been responding to the rapid spread of COVID-19 (coronavirus) across the country. Hospitals have postponed non-emergency operations to avoid putting patients at risk and ensure that hospital resources, beds, and equipment are available to treat patients who are critically ill with COVID-19.

Following the recent announcement by the NHS to gradually reintroduce planned operations, we have produced advice for patients waiting for surgery to address concerns and provide guidance on how you can prepare for your operation.



## 1. WHEN WILL MY OPERATION BE RESCHEDULED?

If your planned surgery was postponed during the last two months, you will now be on a waiting list. You will be contacted in due course to arrange a new date for your operation. The timing will vary depending on demands and pressures and facilities in different hospitals in the UK.

Your surgical team will discuss with you the benefits and risks of surgery as part of your shared decision-making, before going ahead with your operation. This will include consideration of any risk to you from delaying treatment. If you are in a high-risk group for contracting COVID-19, or if you have serious underlying medical conditions, it may be suggested that your operation is deferred until later, when it would be safer for you.



## 2. WHAT IS MY RISK OF GETTING COVID-19 WHILE IN HOSPITAL?

It is currently not possible to entirely eliminate the risk of catching COVID-19 while you are in the hospital. However, hospitals are taking every possible measure to minimise your risk.



### Isolation instructions for our patients before coming into hospital for surgery

In preparation for your hospital admission, you must carefully follow all of the below instructions for isolation. These instructions apply to you for 3 days immediately following your Covid-19 swab. Your procedure will only be able to go ahead in the following circumstances:

1. If you have fully isolated following the instructions below
2. If you (and your household members) have no Covid-19 symptoms
3. If your Covid-19 swab comes back as negative

If any of these three factors cannot be achieved, your surgery will be cancelled until we can be sure it is safe for everyone to proceed.



– Do not leave your house unless in an emergency or for medical treatment



– Do not go out for supplies and medicines, ensure these are delivered to your household



– Do travel to your hospital appointments/admission using your own private vehicle or with someone from your own household. Do not use public transport or taxis. If you do not have your own transport, please call the hospital for advice



– Do not have any visitors in your home or accommodation



– Do not meet with friends and family or attend any gatherings (eg weddings and religious services)



– Do strictly avoid contact with someone who is displaying symptoms of Covid-19 (these include high temperature and/or new continuous cough and/or loss of taste or smell)



– Do try to ensure that you stay 2 metres apart and socially distance yourself from household members at all times (eg. eating separately, sleeping alone at night and ensuring cleaning of shared areas such as bathrooms)

#### Additional instructions

- Wash your hands more often with soap and water
- Avoid touching your eyes, nose and mouth with unwashed hands
- Cover any cough or sneeze with a tissue, then throw in a bin
- Clean and disinfect frequently touched objects and surfaces in your home
- Use separate household items such as towels, bedding and crockery
- If any household member becomes unwell during this the 14 days before your surgery you must report it to the hospital prior to coming in for your admission
- Wash your hands thoroughly after touching pets

#### Pre-operative Covid-19 testing

- As part of our admission process, you will need to be swabbed and you may require some additional tests ahead of your procedure. Your hospital team will further advise you of what is required



# Steroid Injections

**Scientific evidence is relatively non specific, based on 3 main papers**

**Suppression of adrenal axis, which last varying times depending on steroid**

**Systemic effects of steroids after epidural injection**

**Incidence of Influenza infection with the use of intra-articular steroids.**

**Increased risk appears to be 1:1000**

**Current Guidelines from societies vary, most conclude use with caution and only when alternative therapies failed.**

**New experience that maybe steroids suppress the cytokine storm causing the more severe symptoms of COVID.**

**World Evidence: Australian societies have not stopped steroid intra-articular administration**

**Conclusion: Informed consent and shared decision making, use other treatments first but don't exclude steroids from patient management.**



British Orthopaedic  
Association



**B A S S**  
British Association of Spine Surgeons



**FACULTY OF  
PAIN MEDICINE**  
of the Royal College of Anaesthetists



Royal College of  
General Practitioners



**THE BRITISH  
PAIN SOCIETY**  
EXPERTISE WHERE IT MATTERS



CHARTERED  
SOCIETY  
OF  
PHYSIOTHERAPY



## Management of patients with musculoskeletal and rheumatic conditions who:

- are on corticosteroids
- require initiation of oral/IV corticosteroids
- require a corticosteroid injection

**“Only consider a steroid injection if a patient has high levels of pain and disability, has failed first-line measures and continuation of those symptoms will have a significant negative effect on their health and wellbeing and after obtaining informed consent.”**



**Thankyou**

**[www.matthewwelck.com](http://www.matthewwelck.com)**

**[secretary@matthewwelck.com](mailto:secretary@matthewwelck.com)**

**Spire Bushey, RNOH, Wellington,  
Princess Grace.**