

CLÍNIC

BARCELONA

Hospital Universitari

Àmbit d'Atenció Especialitzada / Àmbit hospitalari
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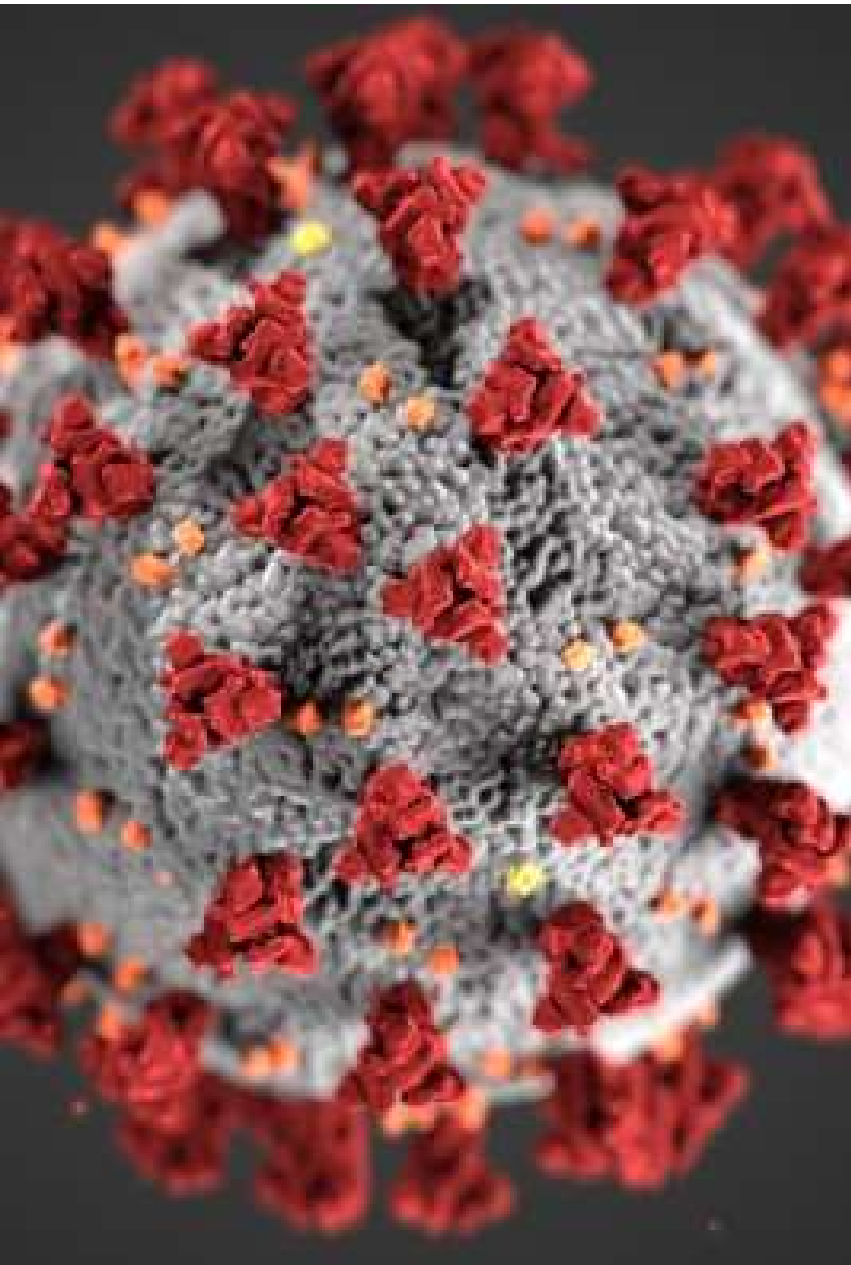


16 amb Webinar
Jornada Sociosanitària

Síndrome de la COVID persistent

10 de novembre 2021

FUNDACIÓ MUTUAMCONVIURE



Agenda

COVID19. Prevalencia e impacto

Post-Acute COVID Syndrome

- Prevalencia y Definición
- Modelos extracomunitarios
- Nuestro equipo (HCB)
- Cómo abordarlo. Protocolos
- Qué hemos ido haciendo

Conclusiones



COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)

Last Updated at (M/D/YYYY)

6/11/2021 12:21

Total Cases

249.267.962

Total Deaths

5.041.208

Total Vaccine Doses Administered

7.241.261.815

28-Day Cases

11.863.580

28-Day Deaths

194.691

28-Day Vaccine Doses Administered

684.906.562

Cases | Deaths by

Country/Region/Sovereignty

US

28-Day: 2.125.378 | 40.285

Totals: 46.437.319 | 753.937

United Kingdom

28-Day: 1.167.176 | 4.074

Totals: 9.286.618 | 142.019

Russia

28-Day: 970.937 | 29.270

Totals: 8.613.533 | 241.095

Turkey

28-Day: 791.364 | 5.946

Totals: 8.178.871 | 71.724

Ukraine

28-Day: 545.248 | 13.453

Totals: 3.200.411 | 76.175

Germany

28-Day: 450.253 | 2.310

Totals: 4.755.891 | 96.492

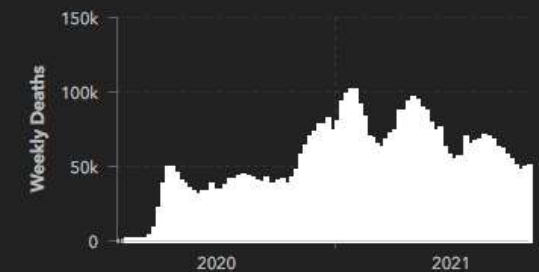
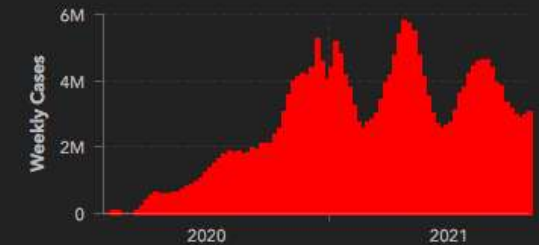
India

28-Day: 409.374 | 9.890

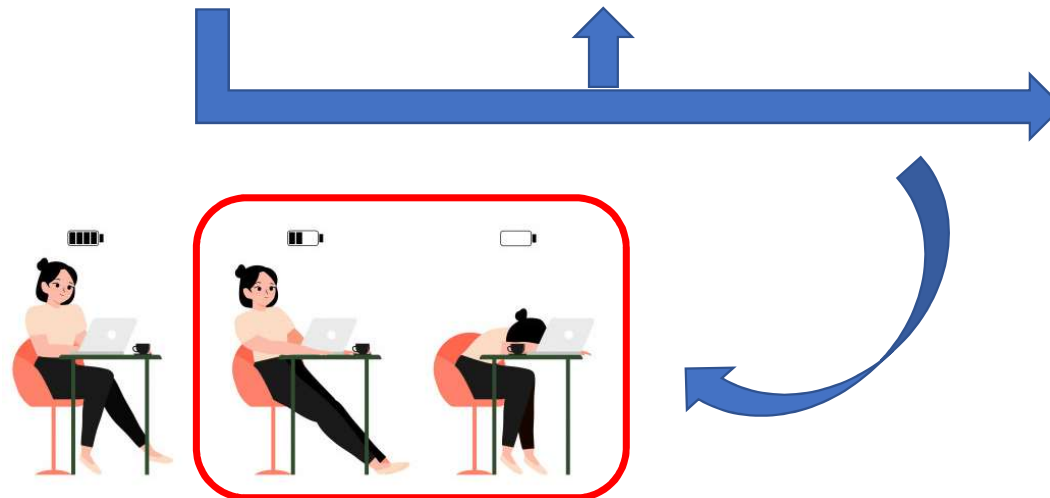


Esri, FAO, NOAA

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Tras el Tsunami COVID19... llega el mar de fondo del PACS



Heterogeneidad

- Prevalencia
- Definición
- Síntomas
- Grupos de edad
- Gravedad COVID19
- *Follow-up*
- Formas de evaluación clínica y recogida de datos



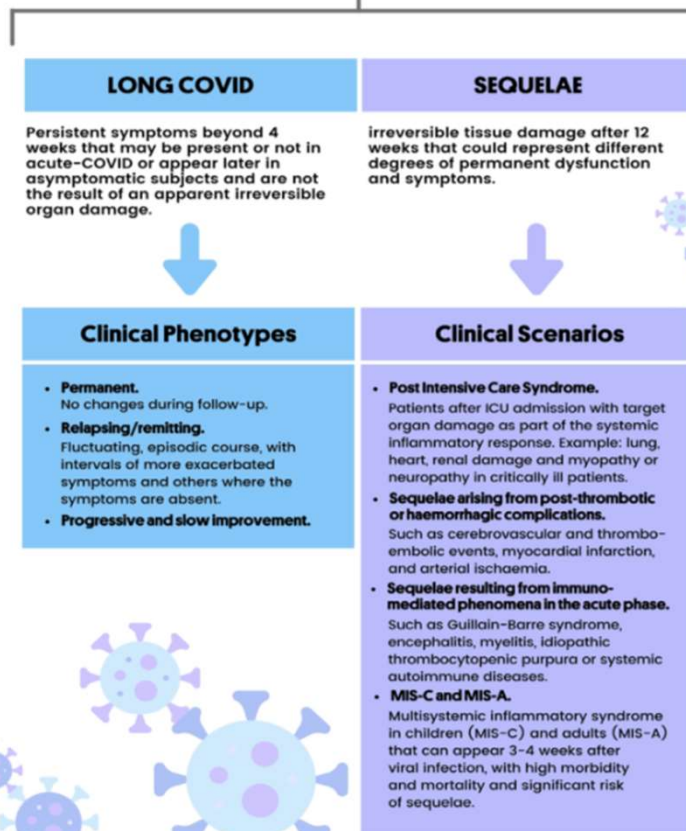
Post-Acute COVID Syndrome (PACS): Definition, Impact and Management

A Report of the Multidisciplinary Collaborative Group for the Scientific Monitoring of COVID-19 (GCMSC)

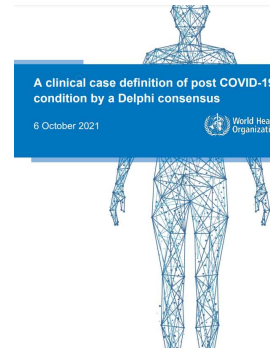
June 2021

Post-Acute COVID syndrome

(4 weeks or more)



Junio 2021



A clinical case definition of post COVID-19 condition by a Delphi consensus

6 October 2021



Post COVID-19 condition occurs in individuals with a **history of probable or confirmed SARS-CoV-2 infection, usually 3 months from the onset of COVID-19 with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis.** Common symptoms include **fatigue, shortness of breath, cognitive dysfunction** but also others* and generally have an **impact on everyday functioning.** Symptoms may be **new onset** following initial recovery from an acute COVID-19 episode or **persist** from the initial illness. Symptoms may also **fluctuate** or **relapse** over time.

A separate definition may be applicable for children.

Notes:

There is no minimal number of symptoms required for the diagnosis; though symptoms involving different organs systems and clusters have been described.

*A full list of described symptoms included in the surveys can be found in Annexes 2 .

Definitions:

Fluctuate – a change from time to time in quantity or quality.

Relapse – return of disease manifestations after period of improvement.

Cluster – two or more symptoms that are related to each other and that occur together. They are composed of stable groups of symptoms, are relatively independent of other clusters, and may reveal specific underlying dimensions of symptoms (32).

Octubre 2021

Diagnóstico- Seguimiento, ¿cómo proceder?

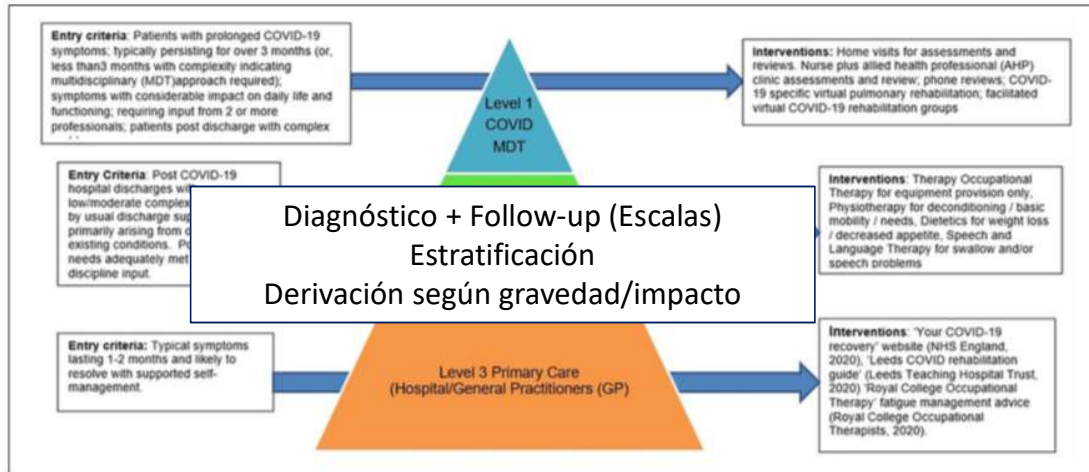


Table 3. Core set of Outcome Measures.

Symptom	Outcome measure
Fatigue	<ul style="list-style-type: none"> COVID-19 Yorkshire Rehabilitation Scale (C19-YRS) Modified Impact Fatigue Scale (MIFS) EuroQol-5D-SL (EQ5D-5L) C19-YRS
Breathlessness	<ul style="list-style-type: none"> Medical Research Council Breathlessness Scale (MRC) 30 second sit-stand test
Deconditioning	<ul style="list-style-type: none"> The Borg Rating of Perceived Exertion (Borg RPE) C19-YRS 30 second sit-stand test EQ5D-5L C19-YRS
Cognition	<ul style="list-style-type: none"> Addenbrooke's Cognitive Examination (ACE-3) C19-YRS
Anxiety and depression	<ul style="list-style-type: none"> EQ5D-5L Generalized Anxiety Disorder Assessment (GAD7) Depression Severity (PHQ9)
Pain	<ul style="list-style-type: none"> C19-YRS

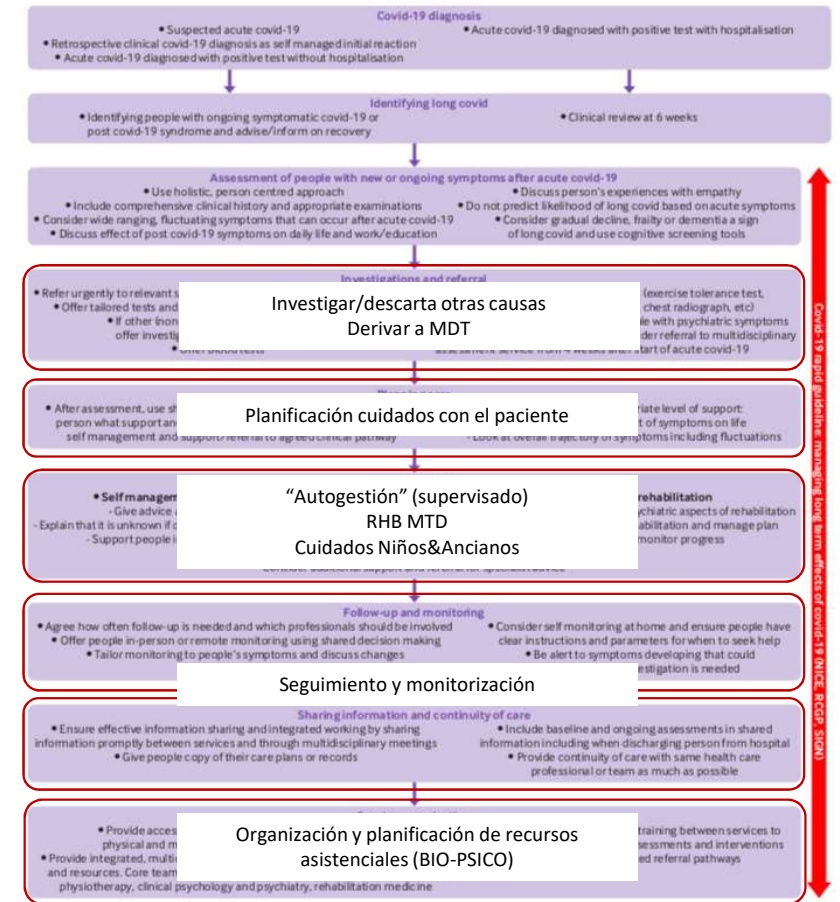
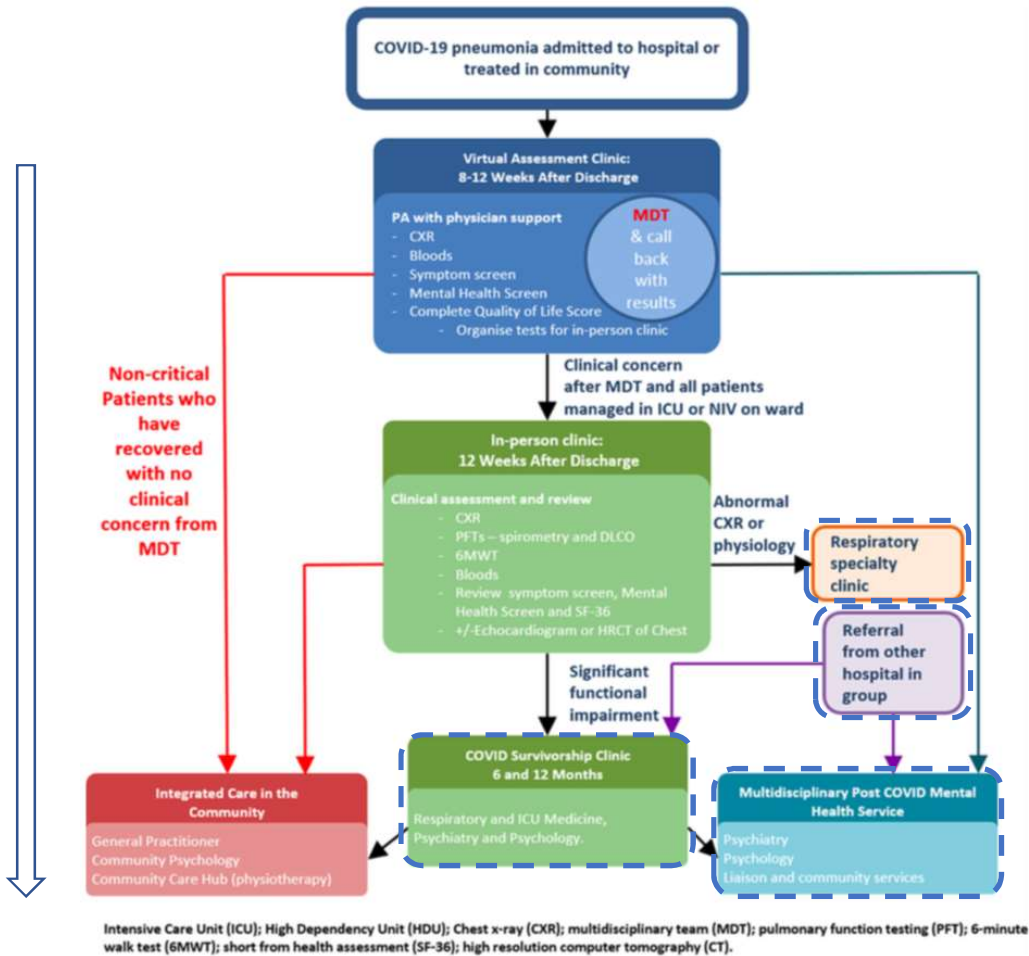


Fig 3 | Overview of the NICE rapid guideline: managing the long term effects of covid-19

An integrated multidisciplinary model of COVID-19 recovery care



Virtual clinic review & in-person clinic follow-up (MDT)

Irish Journal of Medical Science. <https://doi.org/10.1007/s11845-020-02354-9>

The Johns Hopkins Post-Acute COVID-19 Team (PACT): A Multidisciplinary, Collaborative, Ambulatory Framework Supporting COVID-19 Survivors

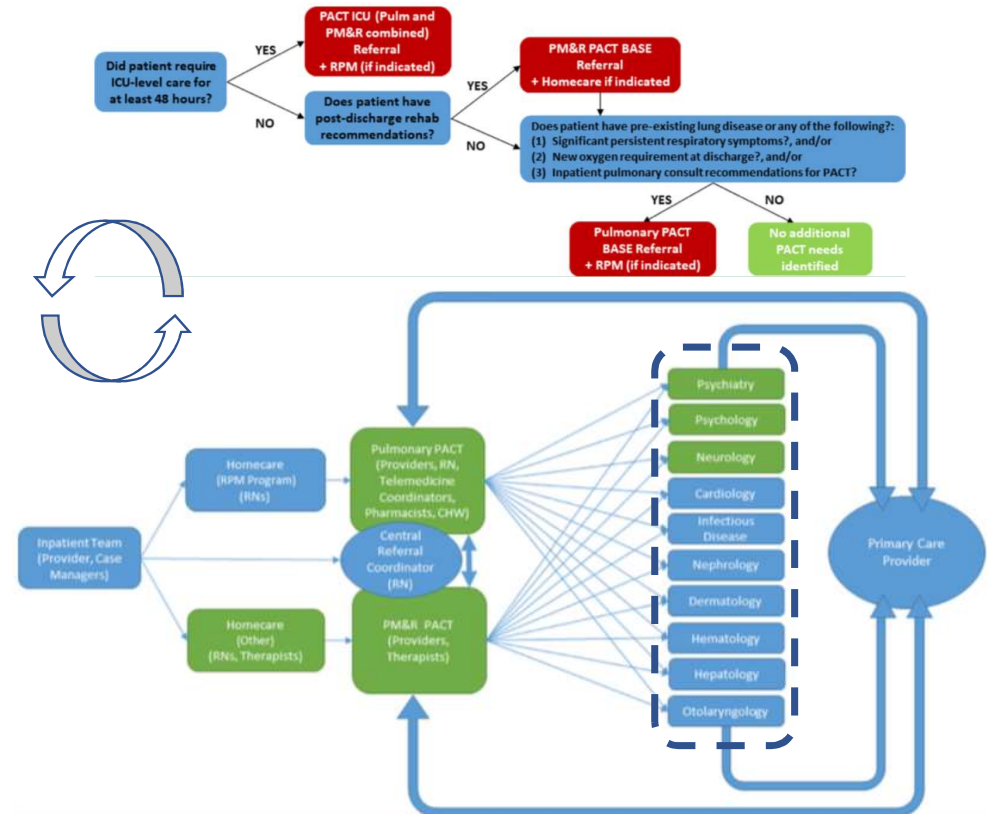


Figure 3 Key services and staff of the Johns Hopkins Post-Acute COVID-19 Team (JH PACT) clinic. Patient flow and contributing staff members represented above. Green indicates participation in weekly multidisciplinary clinic meetings. Primary care is featured prominently as an essential collaboration and line of communication. Psychology consisted of partners in both neuropsychology and rehabilitation psychology. CHW = community health worker; PMR = Physical Medicine and Rehabilitation; RN = registered nurse.

Brigham et al The Johns Hopkins Post-Acute COVID-19 Clinic Framework <https://doi.org/10.1016/j.amjmed.2020.12.009>.

Why do some Covid-19 patients have symptoms long after the virus goes away? NIH aims to find out.

The National Institutes of Health has allocated the first funds of a billion-dollar initiative to figure out why some people aren't recovering from Covid-19.

Full coverage of the coronavirus outbreak

The NIH research aims to learn how SARS-CoV-2, the virus that causes Covid-19, could possibly lead to lasting symptoms, such as profound fatigue, brain fog, headaches, fevers and shortness of breath.

The symptoms "can range from mildly annoying to actually quite incapacitating," Dr. Anthony Fauci, director of the NIH's National Institute of Allergy and Infectious Diseases, said during a White House Covid-19 briefing Wednesday.

"We believe that the insight we gain from this research will also enhance our knowledge of the basic biology of how humans recover from infection, and improve our understanding of other chronic post-viral syndromes and autoimmune diseases," NIH Director Dr. Francis Collins said in a statement Tuesday.

Congress previously allocated \$1.15 billion to the NIH to study long-haulers. That money will be spent over four years. The research announced this week is the first in a series of such projects.

Identificar una necesidad supone reconocer un problema y entender que es necesario dotar de recursos para dar solución o al menos dar soporte (tratamiento, seguimiento e investigación)

The screenshot shows the top of the NHS website. It features the NHS logo on the left, a search bar on the right, and a navigation menu with links for 'About us', 'Our work', 'Commissioning', 'Get involved', and 'Insights Platform'. Below the navigation bar is a yellow banner with text: 'Our advice for clinicians on the coronavirus is here. If you are a member of the public looking for information and advice about coronavirus (COVID-19), including information about the COVID-19 vaccine, go to the NHS website. You can also find guidance and support on the GOV.UK website.'

Search news

You can use the filters to show only news items that match your interests

Keyword

Topic

Date range

From

To

News

Long COVID patients to get help at more than 60 clinics

18 December 2020

Coronavirus

Thousands of patients suffering with the long term symptoms of coronavirus can now access specialist help at more than 60 sites, NHS England announced today.

The assessment centres are taking referrals from GPs for people experiencing brain fog, anxiety, depression, breathlessness, fatigue and other debilitating symptoms.

NHS England has provided £10 million for the network of clinics, which started opening last month. There are now 69 operating across the country with hundreds of patients already getting help.

New research has shown one in five people with coronavirus develop longer term symptoms. Around 186,000 people suffer problems for up to 12 weeks, the Office for

MAS. PACS.
Dra Lledó
MDI. SSC.
Dr Fdez-Solà

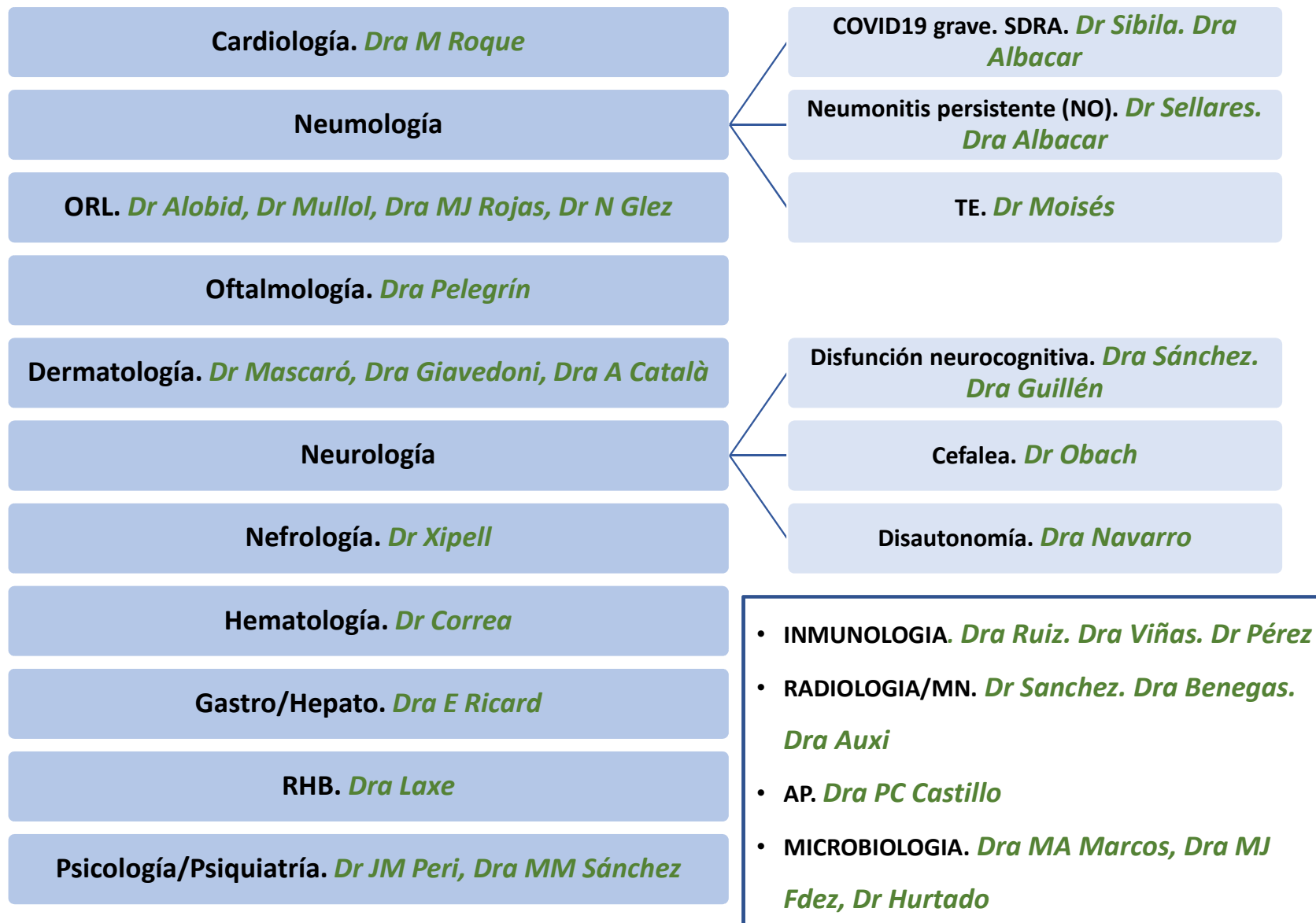
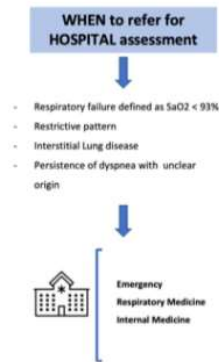


Table 4. Pulmonary algorithms.

Respiratory symptoms

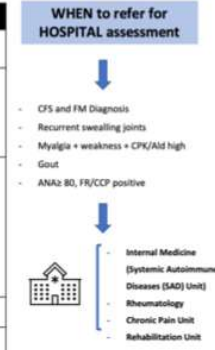
DYSPNEA (33%)
DEFINITION: Persistence of lack of breath > 4 weeks after COVID19 infection
ANAMNESIS AND PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Vital signs AND auscultation: crackles, SaO2 Characteristics of dyspnea Associated Symp: chest pain, fatigue, cough
INITIAL TESTS
<ul style="list-style-type: none"> Blood test: CRP, electrolytes, renal function, Haemogram. Coagulation Chest X-ray Forced Spirometry
CONSIDER:
<ul style="list-style-type: none"> Complete pulmonary function tests Thoracic HRCT scan and/or angio-CT scan Exercise test Ecocardiography



Musculo-skeletal symptoms

ARTHRALGIAS AND ARTHRITIS 33.2%
DEFINITION: Pain (arthralgia) or swelling (arthritis) that may affect one or more joints, leading to functional limitation
ANAMNESIS AND PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Number of joints: mono, oligo, polyarthralgias Which joints, symmetry Inflammatory signs: edema, joint pain or heat
BLOOD TESTS
<ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile, uric, TSH/T4 Haemogram. Coagulation Immunological P: ANA (IFI Hep2), RF/CCP, dsDNA-Ab/C Urinary sediment. Prot/Creat
RADIOLOGICAL STUDIES
<ul style="list-style-type: none"> Rx hands, feet, and other depends on symptoms Ultrasonography
RULE OUT chronic fatigue syndrome (CFS); fibromyalgia (FM) or possible autoimmune systemic disease

MYALGIAS 40.5%
DEFINITION: Muscle pain that may be associated with a feeling of weakness
ANAMNESIS AND PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Distribution: proximal and/or distal Muscular strength ICI previous (severe COVID19) Physical deconditioning
BLOOD TESTS
<ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Nutritional and muscle profile: Prot, Alb, CPK, LDH, Aldolasa, proteinogram, folic, B12, iron metabolism Haemogram. Coagulation Immunological P: ANA (IFI Hep2) Urinary sediment. Prot/Creat
EMG: In case of weakness and/or increase of CPK/Ald
RULE OUT CFS/FM, drugs (statins, antibiotics, etc), physical deconditioning or probably myopathy of the critically ill patient

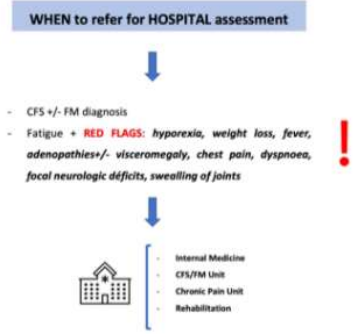


ANA: antinuclear antibodies, RF: rheumatoid factor, CRP: anti-cyclic citrullinated peptide, dsDNA-Ab: anti-DNA antibodies, C: Complement

Table 5. Extra-pulmonary algorithms

Fatigue

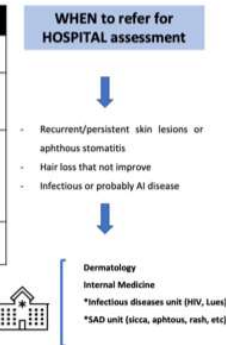
FATIGUE 51.6%
DEFINITION: Prolonged tiredness or exhaustion for no justifiable reason
ANAMNESIS AND PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Vital signs (blood pressure, heart-rate, T°) and oxygen saturation Weight and appetite Adenopathies, visceromegaly and other data suggestive of tumoural etiology Chest pain, dyspnea Neurologic symptoms PCFS: Post-COVID19 Functional Status Scale
BLOOD TESTS
<ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile, TSH/T4, cortisol, Vit D Nutritional and muscle profile: Prot, Alb, CPK, LDH, Aldolasa, proteinogram, folic, B12, iron metabolism Haemogram
RULE OUT chronic fatigue syndrome (CFS) and fibromyalgia (FM) and, cardio-pulmonary or neurologic etiology



Skin & Mucosa Lesions, Hair Loss

SKIN & MUCOSA LESIONS 7.1%
DEFINITION: Some patients may present skin lesions after acute COVID19 such as rashes (erythema, urticaria, purpura, etc) as well as oral mucosal lesions (aphthae)
ANAMNESIS AND PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Skin and mucosal exploration. Associated adenopathies Sicca syndrome: xerostomia, xerophthalmia, xeroderma Pruritus When?: before, during and/or after COVID19 (recurrent aphthous stomatitis)
BLOOD TESTS
<ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Nutritional profile: Prot, Alb, folic, B12, iron metabolism Haemogram Immunological P: ANA (IFI Hep2), dsDNA/C, RF, anti-tissue transglutaminase antibodies Serology: HIV, syphilis, HBV, HCV, HSV, CMV, EBV, Parvovirus-B19
RULE OUT vitamin deficiency, other infection, immune-mediated conditions, drugs

HAIR LOSS 23.5%
DEFINITION: Many people have a hair loss as part of the stress of the infectious event, so-called telogenic effluvium.
PHYSICAL EXPLORATION
<ul style="list-style-type: none"> Distribution: diffuse, localized Other symptoms: pruritus, dermatitis
BLOOD TESTS
<ul style="list-style-type: none"> Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Nutritional profile: Prot, Alb, folic, B12, iron Haemogram
RULE OUT hormonal disorder.



Cardiovascular Signs & Symptoms

CHEST PAIN 34.1%	ARRHYTHMIA (or palpitations) 35%	WHEN to refer for HOSPITAL assessment
<p>DEFINITION: Chest complaints for longer than 4 weeks.</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Vital signs (blood pressure, heart-rate, T₁ and oxygen saturation) Characteristics of chest pain: oppressive, pleuritic, irradiated Associated symptoms: dyspnoea, sweating, dizziness, pale skin, cough, fever Cardiopulmonary auscultation: Heart sounds, crackles Other signs: venous engorgement, lower limbs oedema <p>BLOOD TESTS</p> <ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile Cardiological parameters: ThI, CPK, NT-proBNP Haemogram, Coagulation (D Dimer) Immunological Parameters (ONLY SEROSITIS) ANA (IFI Hep2) <p>ECG: repolarization changes, heart blocks, hypertrophy, arrhythmias.</p> <p>THORAX RADIOGRAPHY (UX): interstitial pattern, vascular redistribution (heart failure), pleural or pericardial effusion, pulmonary mass</p> <p>RULE OUT: myocardial infarction, heart failure, pulmonary hypertension, pulmonary embolism or serositis</p>	<p>DEFINITION: perception of fast or slow heartbeat.</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Vital signs (blood pressure, heart-rate, T₁ and oxygen sat) Frequency, triggering factor (effort, orthostatism) CP auscultation: murmurs, premature complexes <p>BLOOD TESTS</p> <ul style="list-style-type: none"> Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Cardiological parameters: ThI, CPK, NT-proBNP Haemogram, Coagulation (D Dimer in case of tachycardia) <p>ECG: repolarization changes, heart blocks, hypertrophy, arrhythmias, premature complexes</p> <p>THORAX RADIOGRAPHY (UX): interstitial pattern, vascular redistribution (heart failure), pleural or pericardial effusion, pulmonary mass/nodule</p> <p>HOLTER: heart rate variability</p> <p>RULE OUT: extreme bradycardia (BC), frequent supraventricular or ventricular extrasystole, atrial fibrillation (AF) or flutter, ventricular tachycardia (VT) or fibrillation (VF)</p>	<ul style="list-style-type: none"> Myocardial infarction Heart failure Suspicion of Pulmonary hypertension Suspicion of Pulmonary embolism Serositis Extreme BC, AF or flutter, VT, VF <p>Emergency Cardiology Pneumologist Internal Medicine</p>

Gastroenterological and Hepatic symptoms

DIARRHOEA (+/- abdominal pain and vomiting) 24.5%	HEPATITIS	WHEN to refer for HOSPITAL assessment
<p>DEFINITION: Intestinal disorder characterized by frequent and loose bowel movements.</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Vital signs (arterial pressure, fever) Characteristics of diarrhea: episodic, blood or mucus in stools Associated symp: abdominal pain, alternating with constipation, weigh loss Symptoms suggestive of food intolerances or malabsorption <p>BLOOD TESTS</p> <ul style="list-style-type: none"> CRP, ERO Biochemistry: electrolytes, renal function, liver profile, amylase and lipase Nutritional profile: Prot, Alb, folc, B12, iron Haemogram, Coagulation Immunological Parameters: anti-tissue transglutaminase antibodies <p>STOOLS: stool culture, parasites, electroelites diff/calc toxin, blood test</p> <p>COLONOSCOPY</p> <p>RULE OUT: food intolerances, celiac disease, malabsorption syndrome, inflammatory bowel disease, infectious colitis or parasitosis, drugs (dysbacteriosis)</p>	<p>DEFINITION: inflammation of the liver, characterized by jaundice, elevated transaminase levels and weakness</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Risky sexual behaviors, travels, drugs (antibiotics, anti-inflammatory drugs, etc), alcohol abuse, tick bite, etc Jaundice, hepatomegaly, xanthuria, acholia, pruritus, encephalopathy <p>BLOOD TESTS</p> <ul style="list-style-type: none"> CRP Biochemistry: electrolytes, renal function, liver profile (gamma-GT +/- cholestasis), Prot, Alb, LDH, TSH/T4 Haemogram, Coagulation Serology: HIV, HBV, HCV, HAV, HEV, syphilis, CMV, EBV, HSV Immunological: ANA, Proteinogram (gamma-globulins) <p>Abdominal US: biliary tract disorders, spleno-portal axis, hepatic nodule(s), ascites</p> <p>RULE OUT: other viral hepatitis, autoimmune liver diseases, DILI, biliary tract disease</p> <p>DILI: Drug induced Liver Injury</p>	<ul style="list-style-type: none"> Chronic Diarrhoea (≥ 4 weeks) or inflammatory ≥ 2weeks Blood or mucus in stools Oral intolerance Abdominal pain that disturbs sleep AST or ALT > 3x ULN (persistent) +/- coagulopathy HIV, HBC, HCV, syphilis verified Data suggesting autoimmune hepatitis Biliary tract complications <p>Emergency Gastroenterologist Hepatologist Surgeon Internal Medicine</p>

Smell and Taste Loss, Headache

SMELL DISTURBANCES 27.5%	HEADACHE 44.9%	WHEN to refer for HOSPITAL assessment
<p>DEFINITION: Smell disturbances are very frequent not only at the onset of infection, but may also persist in the long term.</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Chronology Changes in follow-up RULE OUT: Drugs (cocaine), traumatism, allergic rhinitis, polyp, previous nasal surgery, smoking, brain tumour. <p>TASTE DISTURBANCES 24.7%</p> <p>DEFINITION: Taste disturbances are very frequent not only at the onset of infection, but may also persist in the long term.</p> <p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Chronology Changes in follow-up RULE OUT: tongue lesions, smoking 	<p>DEFINITION: A pain located in the head, as over the eyes, at the temples, or at the base of the skull.</p> <p>PHYSICAL EXPLORATION</p> <ul style="list-style-type: none"> Chronology and pain location Other symptoms: vomiting, fever, loss of strength and sensitivity, seizures, sleep-disrupting headache, pulse and pain temporal arteries, temporo-mandibular joint pain <p>BLOOD TESTS</p> <ul style="list-style-type: none"> CRP, ERO if > 50 years (Giant Cell Arteritis) Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Nutritional profile: Prot, Alb, folc, B12, iron Haemogram <p>CRANIAL CT</p> <p>RULE OUT: meningeal signs, neurologic manifestations, visual acuity changes, sleep apnea, Giant Cell Arteritis</p>	<ul style="list-style-type: none"> Severe or recurrent headache that does not improve with analgesics or disturbs sleep Neurological symptoms associated Suspicion of Giant Cell Arteritis <p>Emergency Neurology Internal Medicine</p>

Neurocognitive, dysautonomia and Neuropsychiatric dysfunction

NEUROCOGNITIVE DYSFUNCTION 49.9 (50%)	DYSAUTONOMIA 15.7%	NEUROPSYCHIATRIC DYSFUNCTION 42.4%	WHEN to refer for HOSPITAL assessment
<p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <p>Concentration and memory disorders, language impairment, troubles in routine tasks.</p> <p>BLOOD TESTS:</p> <ul style="list-style-type: none"> Biochemistry: electrolytes, renal function, liver profile, TSH/T4 Nutritional profile: Prot, Alb, folc, B12, iron, proteinogram Haemogram Serology: HIV, syphilis, HBV, HCV, HSV 	<p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <p>POTS, inappropriate sinus tachycardia, hyperhidrosis and sphincter dysfunction.</p> <p>EMG, HOLTER AND TILT TABLE TEST</p>	<p>ANAMNESIS AND PHYSICAL EXPLORATION</p> <p>Dythyria/depression, anxiety, emotional lability, psychotic disorder, post-traumatic stress syndrome.</p> <p>BLOOD TESTS: Same studies</p>	<ul style="list-style-type: none"> Severe or moderate neurocognitive dysfunction that affecting quality of life → Neurologist Suspicion of dysautonomia and competitive EMG → Neurologist Severe or moderate neuropsychiatric disorders that affecting quality of life → Emergency Psychology and psychiatry <p>Neurologist Internal Medicine (in case of infectious disease)</p>

Sequelae



POST SEVERE COVID
Patients after hospital admission with target organ damage as part of the systemic inflammatory response.

- Persistent interstitial lung disease, bronchiectasis
- Myocarditis
- Chronic Renal Disease
- Myopathy & Neuropathy (critically ill patient)



- Pneumologist
- Cardiologist
- Nephrologist
- Rehabilitation

THROMBOTIC OR HAEMORRHAGIC COMPLICATIONS
Sequelae arising from post-thrombotic or haemorrhagic complications occurring within the acute phase or at least within 4 weeks.

- Stroke
- Myocardial infarction
- Arterial ischaemia
- Thromboembolic events



- Neurologist
- Cardiologist
- Haematologist (thrombophilia)
- Internal Medicine
- Pneumologist
- Rehabilitation

IMMUNE-MEDIATED PHENOMENA
Sequelae resulting from immune-mediated phenomena during the acute or post-acute phase.

- Acute polyradiculoneuritis (Guillain-Barre)
- Encephalitis
- Myelitis
- Systemic autoimmune diseases



- Neurologist
- Rehabilitation
- S&D unit
- Rheumatologist

MIS-C and MIS-A
Multisystemic inflammatory syndrome in children (MIS-C) and adults (MIS-A) characterised by hyperinflammation that can appear 3-4 weeks after viral infection, with high morbidity and mortality and significant risk of subsequent sequelae.

- Fever, increase acute inflammatory parameters
- Skin rash, mucocutaneous lesions
- Coronary disease
- Neurological symptoms
- Gastroenteric disease



- Emergency
- Paediatrician
- Rheumatologist
- Internal Medicine (S&D unit)

Miscellany

WHEN to refer for HOSPITAL assessment



EYE SYMPTOMS AND VISION 10-18.2%
Red eye, photopsias, myodesopsias, loss of visual acuity, metamorphopsia

- Severe or acute visual loss
- Metamorphopsia
- Acute and recurrent photopsias



- Emergency (amaurosis)
- Ophthalmologist

HEARING LOSS AND VESTIBULAR SYMPTOMS 5-26.1%
Hypoacusia, tinnitus, dizziness, nistagmus
Odynophagia, dysphagia, dysphonia, dyspnea

- Severe or acute hearing loss
- Severe or recurrent dizziness
- Dysphagia, Dysphonia, dyspnea



- Emergency
- ENT specialist

HAEMATOLOGICAL/THROMBOSIS 7.3/2.5
Cytopenias: anaemia, leukopenia, thrombopenia
Deep vein thrombosis, pulmonary embolism, arterial ischemia

- AHA1, Lsuko >3.000, PlAt <100.000
- Venous thromboembolism
- Acute arterial ischemia



- Emergency
- Haematologist
- Internal Medicine/Pneumologist

ENDOCRINOLOGICAL DISORDERS
Diabetes mellitus, thyroiditis, menstrual cycle disorders, erectile dysfunctions, bone demineralization

- Thyrotoxic storm
- Menstrual cycle disorders
- Erectile dysfunctions
- Bone demineralization



- Emergency
- Gynaecologist
- Urologist
- Rheumatologist

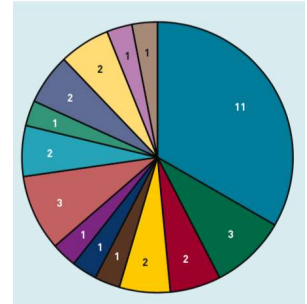
Tratamiento

- ❖ **NO TRATAMIENTO ESPECÍFICO**, sí por síntomas.
 - ❖ “Recomendaciones” TTO (FLCCC Alliance) Jun/21
 - ❖ **Clinical Trials:**
 - Vacuna (Arnold et al; ComPaRe Coh Lancet 2021)
 - Leronlimab (Ac monoclonal frente CCR5). Varios
 - Montelukast (Esperanza[NCT04695704])
- ❖ **DESCARTAR** otras causas
- ❖ **INDIVIDUALIZAR**
- ❖ **REHABILITACION** (3Ps) → **3P → Priorización, Planificación y el Control del ritmo (“Pacing”)**
- ❖ Soporte **PSICOLOGICO** (grupos de terapia)
- ❖ **EQUIPO MULTI-INTERDISCIPLINAR**

Recommendations for the recognition, diagnosis, and management of long COVID:

a Delphi study

- **14 especialidades** que VEN y TRATAN pacientes (**EXPERIENCIA**)
“Robust consensus method from a unique group of ‘lived-experience’ professionals and front-line clinicians in the field.”
- **35 recomendaciones**
 - 6 → Organización clínica (Box 2)
 - 13 → Diagnóstico (Box 3)
 - 16 → Manejo (Boxes 4-5)
- Advierten del **riesgo de ciertas medicaciones** ofrecidas como “tratamientos” **CAUTELA**
- Advierten de la **exacerbación de síntomas (PREVENCIÓN)**
“Physical or cognitive workload beyond the patient’s ‘energy envelope’ may cause an exacerbation of symptoms including fatigue, fever, myalgia, and breathlessness. Exacerbations may manifest immediately or after a delay of 24–48 hours and may last days or months”.
- **Manejo holístico (MDT)**



Phillips M. British Society of Rehabilitation Medicine, 2020.
Greenhalgh et al. BMJ 2020;370:m3026 | doi:10.1136/bmj.m3026
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Respuesta de World Physiotherapy
al COVID-19
Documento informativo 9

ABORDAJE DE UNA REHABILITACIÓN SEGURA
PARA LAS PERSONAS QUE PADECEN COVID
PERSISTENTE: ACTIVIDAD FÍSICA Y EJERCICIO



junio 2021

3P → Priorización, Planificación y el Control del ritmo ("Pacing")

How to manage post-viral fatigue after COVID-19

Practical advice for people who have been treated in hospital

Post-viral fatigue is when you have an extended period of feeling unwell and fatigued after a viral infection.

Fatigue is a normal part of the body's response to fighting a viral infection such as COVID-19, it's also common after any serious or critical illness that requires being admitted to hospital. Fatigue is likely to continue for some time after the infection has cleared. It can make you sleep more, feel unsteady on your feet, make standing for long periods difficult, as well as affecting your ability to concentrate and your memory.

How to manage post-viral fatigue after COVID-19

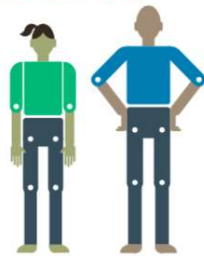

Practical advice for people who have recovered at home

Post-viral fatigue is when you have an extended period of feeling unwell and fatigued after a viral infection.


Fatigue is a normal part of the body's response to fighting a viral infection such as COVID-19. Fatigue is likely to continue for some time after the infection has cleared. It can make you sleep more, feel unsteady on your feet, make standing for long periods difficult, as well as affecting your ability to concentrate and your memory.

Support for rehabilitation: self-management after COVID-19-related illness


second edition

Reach your right arm up to the ceiling and then lean over to the left slightly; you should feel a stretch along the right side of your body. Repeat on the other side.



Put your arm out in front of you. Keeping your arm straight, bring it across your body at shoulder height, using your other hand to squeeze your arm to your chest so you feel a stretch around your shoulder. Repeat on the opposite side.



Sit on the edge of a chair with your leg out straight in front of you with your heel resting on the ground. Place your hands on your other thigh as support. Sitting as tall as you can, bend slightly forward at your hips until you can feel a slight stretch down the back of the leg that is stretched out. Repeat on the opposite side.



Stand with your feet apart, lean forward onto a wall and step one leg behind you. Bend your front knee, keeping your back leg straight and your heel on the floor. You should feel a stretch in the back of your lower leg. Repeat on the opposite side.

Borg CR-10	Level of exertion	Phases				
		1	2	3	4	5
0	Rest/no exertion at all					
1	Really easy/extremely light					
2	Easy/very light					
3	Moderate/light					
4	Somewhat hard					
5	Hard (heavy)					
6						
7	Very hard					
8						
9	Extremely hard					
10	Maximal exertion					



**Managing problems
with attention, memory,
and thinking clearly**

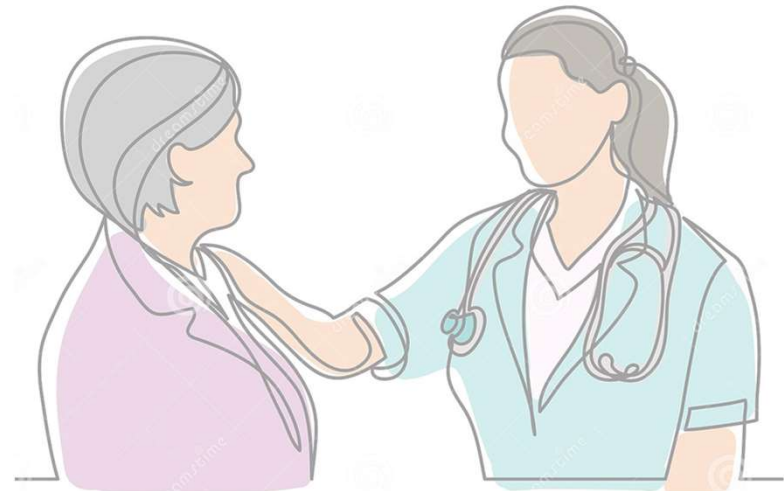


Returning to work

Developing services for long COVID: lessons from a study of wounded healers

Authors: Emma Ladds,^A Alex Rushforth,^B Sietse Wieringa,^C Sharon Taylor,^D Clare Rayner,^E Laiba Husain^F and Trisha Greenhalgh^G

*“I think if someone can acknowledge uncertainty then I think that really helps because I think we all know that nobody knows what to do with us but I think where it can become frightening is if they’re kind of claiming unwarranted certainty. So, I think actually just saying, ‘**Well actually, we don’t really know what’s going on but yes stick with us we’ll try and work it out.**’”*



ABCDEF of long COVID clinical quality standards

- A: Access
- B: Burden of illness
- C: Clinical responsibility and continuity of care
- D: MultiDisciplinary rehabilitation services
- E: Evidence-based standards
- F: Further development of the knowledge base and clinical services

Mensajes clave

1 Según las estimaciones, 10-15% de las personas sufren síntomas persistentes después de la infección con SARS-CoV-2.

2 En Cataluña, cerca de 90.000 personas sufren o han sufrido síntomas persistentes.

3 Proponemos que el término **Síndrome de COVID-19 post-agudo (PACS)** incluya dos escenarios que no son mutuamente excluyentes:
• **COVID-prolongado:** los síntomas aparecen o persisten más allá de 4 semanas después de la infección.
• **Secuelas:** daño orgánico irreversible más allá de 12 semanas después de la infección.

4 Es fundamental disponer de una **definición clara y apropiada** de este síndrome para establecer registros de pacientes y llevar a cabo estudios de investigación.

5 Se necesita un **código CIE específico** para este síndrome y sus fenotipos clínicos, para facilitar su identificación, permitir las comparaciones y evaluar mejor su impacto a nivel mundial.

6 Existe una **gran variedad de síntomas de PACS**, pero los más frecuentes son fatiga, síntomas respiratorios y alteraciones neurológicas.

7 Los **mecanismos subyacentes en el PACS no se conocen con claridad**, pero podrían implicar daño citopático, desregulación inmunológica y daño inflamatorio como respuesta a la infección aguda.

8 Para una gestión clínica adecuada se requieren **circuitos claros para derivar a estos pacientes** desde la atención primaria al hospital.

9 También recomendamos la creación de **unidades multidisciplinares** para un seguimiento efectivo y holístico de estos pacientes.

10 Las autoridades sanitarias deben asignar los **recursos apropiados** para abordar esta situación emergente y optimizar los resultados en salud.

Conclusiones

- RECONOCER Y DIAGNOSTICAR
- CARACTERIZAR. CLUSTERS
- TRATAMIENTO & RHB ... Y PREVENCIÓN!
- INVESTIGACIÓN (-OMICS)
- MANEJO MULTI-INTERDISCIPLINAR. Relación TRANSVERSAL AP-AH-AI
- ASOCIACIONES DE PACIENTES

“Tackling a multifaceted condition requires a multi-disciplinary approach.”

Muchas gracias

