Apheresis Center

Dr. Gustavo Aguirre-Chang, Medical Advisor

Dr. Aguirre-Chang, who has more than 30 years of professional experience, has worked with us not only on the digital version of the diagnostic screening test for Microclots/ Hypoperfusion/ Hypercoagulability (HHM) Symptoms, but has also contributed with his medical research carried out on Covid in its different forms: acute, subacute and mainly chronic Covid (Long Covid or PASC) and Post Vac Syndrome. In addition, he has developed several widely used "Therapeutic Tests" and large parts of his medication protocols against viral load, hyperactivated platelets and hypercoagulation have been integrated into 'The Cyprus Protocol'. He has also developed specific diets for Long Covid.

Based on his experience in Long Covid, he is currently developing protocols for ME/CFS, Fibromyalgia, POTS, Autoimmune Diseases and other diseases and syndromes with fatigue and chronic pain.

Dr. Gustavo Aguirre-Chang, Asesor Médico

El Dr. Aguirre-Chang, que cuenta con más de 30 años de experiencia profesional, ha trabajado con nosotros no solo en la versión digital de la prueba diagnóstica de detección de síntomas de microcoágulos / hipoperfusión / hipercoagulabilidad (HHM), sino que también ha contribuido con su investigación médica realizada sobre Covid en sus diferentes formas: Covid agudo, subagudo y principalmente crónico (Long Covid o PASC) y Síndrome Post Vac. Además, ha desarrollado varias "pruebas terapéuticas" ampliamente utilizadas y gran parte de sus protocolos de medicación contra la carga viral, las plaquetas hiperactivadas y la hipercoagulación se han integrado en "El Protocolo de Chipre". También ha desarrollado dietas específicas para Long Covid.

Basado en su experiencia en Long Covid, actualmente está desarrollando protocolos para EM / SFC, fibromialgia, POTS, enfermedades autoinmunes y otras enfermedades y síndromes con fatiga y dolor crónico.

Somos autores de los primeros reportes de casos realizados a nivel mundial respecto al uso de medicamentos contra la Carga Viral en COVID Largo o COVID Crónico.

INCLUSIÓN DE LA IVERMECTINA EN LA PRIMERA LÍNEA DE ACCIÓN TERAPÉUTICA PARA COVID-19

Se reporta una muy significativa disminución de la Tasa de Letalidad con su uso

Aguirre Chang, Gustavo A. Graduado en la UNMSM. ResearchGate. 2 de Mayo del 2020.

Doi: http://dx.doi.org/10.13140/RG.2.2.34689.48482/7

RESUMEN

Se revisa las evidencias existentes al 30 de Abril del 2020 en cuanto al uso de Ivermectina en COVID-19. También se hace un reporte tipo serie de casos de 7 de los pacientes tratados a nivel local a la fecha. Un estudio puesto a disposición el 3 abril del 2020 en la web en la revista Antiviral Research, encontró que in vitro con una sola dosis de Ivermectina se redujo el SARS-CoV-2 en 99.8% después de 48 horas. Posteriormente, el 19 de Abril del 2020, fue puesto a disposición en la web de SSRN un estudio que obtuvo participantes de 169 hospitales de todo el mundo, este estudio incluye 704 pacientes tratados con Ivermectina, y sus correspondientes 704 controles. Los Resultados del estudio indican que la Tasa de Letalidad en los pacientes hospitalizados que usaron Ivermectina fue 6.1 veces menor en comparación con los pacientes que no usaron Ivermectina (1.4 vs 8.5%).

Por su parte, en República Dominicana, el Médico Neumólogo Johnny Tavares C. reporta que va tratando 247 pacientes con Ivermectina con respuesta favorable en todos los casos y no ha manifestado ningún caso fatal.

De manera similar, a nivel local, si bien a la fecha aún no son muchos los casos documentados, se hace evidente que el uso de la Ivermectina resulta en una muy significativa disminución de la Tasa de Letalidad y además se observa que en el 100% de los casos tratados con Ivermectina se presenta una mejoría de la enfermedad y resolución de la fiebre dentro de las 48 horas de iniciado el tratamiento.

COVID-19 POST-AGUDA O PROLONGADA: TRATAMIENTO CON IVERMECTINA PARA PACIENTES CON SINTOMAS PERSISTENTES O POST-AGUDOS

Aguirre-Chang, Gustavo; Castillo Saavedra, Eduardo; Yui Cerna, Manuel; Trujillo Figueredo, Aurora; Córdova Masías, José A. Reseach Gate. 11 de Julio 2020.

RESUMEN:

INTRODUCCIÓN: Se estima que entre el 10 al 45% de las personas que se enferman de COVID-19 presentará síntomas después de la etapa aguda de la enfermedad y que estos persistirán durante semanas, desarrollando lo que se denomina Síntomas Persistentes o Post-Agudos de COVID-19. No existe consenso, ni hay una publicación sobre un tratamiento específico y efectivo para estos casos. El conocimiento es escaso en cuanto a su etiopatogenia.

MATERIAL Y MÉTODOS: En el presente estudio se incluyeron a 33 pacientes que presentaban Síntomas Persistentes o Post-Agudos de COVID-19 y que se encontraban entre las semanas 4 a 12 desde la fecha de inicio de síntomas. Se excluyeron del estudio a los pacientes cuyos síntomas principales eran del sistema muscular, como fatiga por debilidad muscular, disminución de la fuerza muscular y mialgia (dolor muscular).

Se siguió el siguiente protocolo: en los casos con síntomas leves se administró Ivermectina a una dosis de 0.2 mg. por kilo de peso corporal por día durante 2 días. Si los pacientes aún presentaban síntomas después de las 2 dosis, se administraron 2 días más de tratamiento con Ivermectina a la misma dosis. Para los casos con síntomas moderados, se prescribió una dosis de 0,4 mg por kilogramo de peso corporal durante 2 días, y luego se continuó con 0,2 mg por kilogramo de peso corporal durante 2 días más.

We are authors of the first reports of cases carried out worldwide regarding the use of drugs against Viral Load in Long COVID or Chronic COVID.

INCLUSION OF IVERMECTIN IN THE FIRST LINE OF THERAPEUTIC ACTION FOR COVID-19.

A very significant decrease in Mortality Rate reported with its use.

Aguirre Chang, Gustavo A. UNMSM. ResearchGate. May 2, 2020.

English translation copy edited by Madeline Oh

doi: http://dx.doi.org/10.13140/RG.2.2.26424.57600/2

SUMMARY

Current evidence until April 30, 2020 regarding the use of Ivermectin in COVID-19 is reviewed.

A case series report is also made of 7 patients treated locally to date.

A study made available online on April 3, 2020 in the Journal of Antiviral Research found that in vitro, a single dose of Ivermectin reduced SARS-CoV-2 by 99.8% after 48 hours. Subsequently, on April 19, 2020, a study was made available on the SSRN website. This study, which included participants from 169 hospitals around the world, evaluated 704 patients treated with Ivermectin and compared them with their corresponding 704 controls. The result of the study demonstrated that the Mortality Rate in patients who took Ivermectin was 6.1 times lower than that of patients who did not take Ivermectin (1.4 vs 8.5%).

In addition, in the Dominican Republic, the Pulmonologist Johnny Tavares C. reported that he had treated 247 patients with Ivermectin and a favorable response was observed in all cases, and there were no fatalities.

Similarly, although there had not been many documented cases locally to date, it is evident that the use of Ivermectin results in very significant decrease in the Fatality Rate. It has also been observed that in 100% of the cases treated with Ivermectin, there was improvement in the disease and resolution of fever was seen within 48 hours of starting the treatment.

A New Therapeutic Scheme is presented here as it relates to the degree the Severity of disease and the

POST-ACUTE OR PROLONGED COVID-19: TREATMENT WITH IVERMECTIN FOR PATIENTS WITH PERSISTENT, OR POST-ACUTE SYMPTOMS

Aguirre-Chang, Gustavo; Castillo Saavedra, Eduardo; Yui Cerna, Manuel; Trujillo Figueredo, Aurora; Córdova Masías, José. Reseach Gate. July 11, 2020.

English translation copy edited by Madeline Oh

SUMMARY

INTRODUCTION: It is estimated that between 10 to 45% of people who become ill with COVID-19 will present with symptoms after the acute stage of the disease. These symptoms will persist for weeks, developing what is called Persistent or Post-Acute Symptoms of COVID- 19. There is no consensus, nor has there been a publication on specific and effective treatment for these cases. Knowledge is quite lacking as to its etiopathogenesis.

MATERIAL AND METHODS: 33 patients with Persistent or Post-Acute Symptoms of COVID-19, who were between weeks 4 and 12 from the onset of symptoms were enrolled in the present study. Patients whose main symptoms were musculoskeletal such as fatigue due to muscle weakness, diminished muscle strength and myalgia (muscle pain) were excluded. The following protocol was followed: in cases with mild symptoms, Ivermectin was administered at a dose of 0.2 mg per kilogram of body weight per day for 2 days. If patients still had symptoms after the 2 doses, 2 additional days of Ivermectin treatment were given at the same dose. For cases with moderate symptoms, a dose of 0.4 mg per kilogram of body weight was prescribed for 2 days, followed by 0.2 mg per kilogram of body weight for 2 additional days. If a patient continued to have symptoms after the fourth day of treatment, more doses of Ivermectin were indicated. Treatment

https://www.researchgate.net/profile/Gustavo-Aguirre-Chang/stats

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Research Interest Score	Reads	Citations	Recommendations
+2.3 last week	+2,470 last week	+3 last week	---

PRIMER PROTOCOLO Y PRUEBA TERAPÉUTICA CON EMTRICITABINA/ TENOFOVIR DISOPROXILO (TRUVADA O GENÉRICO) COMO AYUDA AL DIAGNÓSTICO DE PERSISTENCIA VIRAL EN LONG COVID, COVID PERSISTENTE O SÍNDROME POST COVID AGUDO (PACS) Y EN SFC/EM. También se puede realizar con Sofosbuvir o con Nirmatrelvir/ Ritonavir (Paxlovid). Además indicamos este Test en el Síndrome de COVID Post-Vacunal o Síntomas Persistentes Post-Vacunal.

ANTIPLAQUETARIO para Hiperactividad	Días 1 a 3: Ácido Acetil Salicílico= AAS (Aspirina u otras marcas) 325mg después del almuerzo. Si pesa más de 95 kg se indica 500mg. *Alternativas: Acetilsalicilato de Lisina 500mg/d, Clopidogrel 75mg/d, Jengibre 1100mg c/ 12 horas.*
ANTIVIRALES PARA LA PERSISTENCIA VIRAL	Días 4 a 12: Emtricitabina/Tenofovir DF (Truvada o genérico) 1 comprimido al día (de 200/300mg) entre las 4 a 6 pm. Evitar: Ibuprofeno, Diclofenaco, Naproxeno, Indometacina, otros AINES, Carbamazepina, Metformina, Rifampicina, Amikacina, Aciclovir y otros medicamentos que puedan afectar la función renal o hepática. En los mayores de 55 años, diabéticos, hipertensos o con alguna patología renal, se les debe evaluar la función renal previamente, y en ellos se recomienda que desde el 1er día tomen Nebivolol 2.5mg al día y a partir del 5to día suben a 5mg al día. Si el paciente logra una mejoría en sus síntomas de 40% a más, o de 4 a más puntos de 10, la Prueba Terapéutica es POSITIVA para Persistencia Viral sensible a los medicamentos dados. Si la Prueba resulta Negativa se debe investigar otras causas.
FAMOTIDINA	Días 1 a 12: 40mg a las 8am, 3 y 10pm. Si pesa de 75 a 95 kilos se sube solo la dosis de las 10pm a 80 mg. Si pesa + de 95kilos se sugiere 80mg por toma. De 35 a 42kg se indica 40mg a las 10am y 10pm. *Alternativas: Bicarbonato de Sodio.*
DIETA EVITE POR 12 DÍAS	Café, gaseosas y bebidas con cafeína o con lactato, té negro; tabaco, cannabis; alcohol de todo tipo (cocteles, cerveza, vino, etc); nueces de todo tipo, avellanas, pecanas, almendras, maní, pistachos, castañas; naranja, toronja o pomelo, mandarina, limón, plátano, coco, moras, anacardo o marañón, ciruela, kiwi, cacao, chocolate de cacao; semillas de sésamo (ajonjolí), avena, arroz integral, trigo, pan integral de trigo, levadura, guisantes o arverjas, lentejas, garbanzos, judías verdes, cebada, linaza o semillas de lino, semillas de: calabaza, chía, amapola y girasol; tomate, berenjena, espinaca, rutabaga o colinabo, pepino, col o repollo, coliflor, alcachofa, espárragos; ají, curry, salsa de tomate, salsa de soya, glutamato monosódico, vinagres, mayonesa, mostaza; salchichas, embutidos, conservas de carne (enlatados); pescados y mariscos (sobre todo conservas); dulces, productos de pastelería, colorantes; comer bajo de azúcar y sal.
CONSUMA MÁS POR 12 DÍAS	Pavo, pollo, huevo, carne de res (no enlatada); nabo, zanahoria, jengibre, ajo, apio en jugo, aguacate (palta) pero no más de 1 al día; queso, pero hasta 75 gr/día (no los curados ni semicurados, ni de cabra); yogur, pero hasta 1 vaso/día; mango, albaricoque, níspero, cereza, piña, pera, higo, carambola; quinua, amaranto (kiwicha). No se está indicando consumir todo, sería una parte. Y además puede consumir alimentos que No estén incluidos en los que debe evitar.

Tratar Depleción de Nutrientes, Estrés Oxid. y Disf. Inmune

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. Primer Protocolo y Prueba Terapéutica con Emtricitabina/Tenofovir disoproxilo (Truvada o genérico) como ayuda al diagnóstico de Persistencia Viral Long COVID, COVID Persistente o en el Síndrome Post COVID Agudo (PACS) y en SFC/EM. ResearchGate. Dic. 2022.

FIRST PROTOCOL AND THERAPEUTIC TEST WITH EMTRICITABINE/TENOFOVIR DISOPROXIL (TRUVADA or GENERIC) TO ASSIST THE DIAGNOSIS OF VIRAL PERSISTENCE IN LONG COVID OR POST ACUTE COVID SYNDROME (PACS) AND IN ME/CFS. It can also be done with Sofosbuvir or Nirmatrelvir/Ritonavir (Paxlovid or generic). We also indicate this Test for Post-Vaccine COVID Syndrome (PVACS) or Post-Vaccine Persistent Symptoms.

ANTIPLATELET x Hyperactivity	**Days 1 to 3: Acetylsalicylic Acid= ASA (Aspirin or other brands) 325 mg after lunch. If you weigh more than 95 kg 500mg is indicated. *Alternatives: Lysine Acetylsalicylate 500mg/d, Clopidogrel 75mg/d, Ginger 1100mg every 12 hours.***
ANTIVIRALS FOR VIRAL PERSIS-TENCE	**Days 4 to 12: Emtricitabine/Tenofovir DF (Truvada or generic) 1 tablet/day (of 200mg/300mg) between 4 and 6pm. Avoid: Ibuprofen, Diclofenac, Naproxen, Indomethacin, other NSAIDs, Carbamazepine, Metformin, Amikacin, Rifampicin, Acyclovir and other drugs that may affect kidney or liver function. In those over 55 years of age, diabetics, hypertensive or with any kidney pathology, kidney function should be evaluated beforehand, and in them it is recommended that from the 1st day they take Nebivolol 2.5mg a day and from the 5th day they go up to 5mg a day. If the patient achieves an improvement in their symptoms of 40% or more, or 4 or more points out of 10, the Therapeutic Test is POSITIVE for Viral Persistence sensitive to indicated drugs. If the Test is negative, other causes should be investigated.**
FAMOTIDINE	**Days 1 to 12: 40mg is indicated at 8am, 3pm and 10pm. If the patient weighs between 75 and 95 kilos, only the 10pm dose is increased to 80 mg. If the patient weighs more than 95 kilos, 80mg per shot is suggested. From 35 to 42kg, 40mg is indicated at 10am and 10pm. *Alternatives: Sodium Bicarbonate (Baking soda) or Potassium or Andrews Salt.***
DIET **AVOID FOR 12 DAYS**	**Coffee, soda and drinks with caffeine or lactate, black tea; tobacco, cannabis; alcohol of all kinds (cocktails, wine, beer, etc); walnut of all kinds, hazelnut, pecans, almonds, peanut, chestnuts, pistachios; orange, tangerine, grapefruit, lemon, banana, coconut, blackberries, cashew or marañon, plums, kiwi, cocoa, chocolate; sesame seeds, oatmeal, brown rice, wheat, whole wheat bread, yeast, peas, green bean, chickpeas, lentils, barley, flax or linseed, seeds of: pumpkin, chia, poppy and sunflower; tomato, spinach, eggplant, rutabaga or kohlrabi, cabbage, artichoke, asparagus, cauliflower, cucumber; chili, curry, tomato sauce, vinegars, monosodium glutamate, soy sauce, mayonnaise, mustard; sausages, canned meat, cold cuts; fish and shellfish (especially canned); sweets, pastries, colorants; eat low sugar and salt.**
CONSUME FOR 12 DAYS	**Turkey, chicken, egg, beef (not canned, fresh); carrot, turnip, ginger, garlic, celery juice, aguacate (avocado) but not more than 1 a day; cheese, but up to 75 gr/day (and not cured or semi-cured, or goat); yogurt, but up to 1 glass/day; mango, apricot, medlar, cherry, pear, pineapple, fig, carambola; amaranth (kiwicha), quinoa. It is not indicating to consume everything, it would be part. And you can also consume foods that are not in the ones you should avoid.**

Treat Nutrient Depletion, Oxidative Stress and Immune Dysfunctions

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. First Protocol and Therapeutic Test with Emtricitabine/Tenofovir disoproxil (Truvada or generic) to assist the diagnosis of Viral Persistence in Long COVID or Post Acute COVID Syndrome (PACS) and in ME/CFS. ResearchGate. December 18, 2022.

“PRUEBA TERAPÉUTICA” CON SOFOSBUVIR COMO AYUDA AL DIAGNÓSTICO DE PERSISTENCIA VIRAL EN LONG COVID, COVID PERSISTENTE O SINDROME POST COVID (PACS) Y EN SFC/EM. **Además indicamos este Test en el Síndrome de COVID Post-Vacunal (PVACS) o Síntomas Persistentes Post-Vacunal.**

PRIMERO: Responder en casa, el cuestionario del Test de HHM (Hipoperfusión, Hipercoagulabilidad y Microcoágulos) disponible gratuitamente en: https://www.researchgate.net/publication/362633947

Existe una correlación directa entre el puntaje obtenido en el Test de HHM, con una mayor presencia de Microcoágulos (que vienen a ser como Biofilms de los vasos sanguíneos= BioCoágulos), que a su vez se correlacionan con una mayor Carga Viral y/o Microbiana.

CLASIFICACIÓN CLÍNICA DE LA ENFERMEDAD CRÓNICA O SÍNDROME SEGÚN RESULTADO OBTENIDO EN EL TEST DE HHM:

10 a más puntos: con este puntaje se sustenta dar el Diagnóstico Clínico de un Síndrome de HHM asociado a la presencia de Microcoágulos y Persistencia Viral. En estos casos se justifica realizar la Prueba o Reto Terapéutico con Sofosbuvir u otro Antiviral.

Entre 6 a 9 puntos: se debe evaluar individualmente el Riesgo/Beneficio de realizar la Prueba, Test o Reto Terapéutico en el paciente.

Menos de 6 puntos: se debe investigar otras causas, ya que son menores las probabilidades de que exista Persistencia Viral.

SEGUNDO: Preguntar si tiene síntomas o antecedentes patológicos de alergias, asma, rinitis, faringitis o dermatitis alérgica, MCAS y otras enfermedades caracterizadas por la presencia de hipersensibilidad o hiperreactividad, es decir, que el organismo del paciente reacciona exageradamente ante agentes externos que pueden ser microorganismos o partículas de estas, el niquel u otros metales, vacunas, toxinas u otros. En caso de que el paciente tenga estos antecedentes se clasificará como un paciente con Hipersensibilidad.

TERCERO: PROTOCOLO A INDICAR. En todos los casos el Protocolo inicial va a incluir como mínimo lo siguiente:

1) **ANTIPLAQUETARIO: Se indica solo los 3 primeros días: Ácido Acetil Salicílico (Aspirina, otras) 325mg después del almuerzo. Si es un paciente con Hipersensibilidad, las alternativas son: Clopidogrel 75mg/día; Jengibre 1100mg c/12 horas; Taxifolina 0.8-1 mg/kg/día.**
2) **ANTIVIRAL: A partir del 4to día se indica: Sofosbuvir (solo o con otro antiviral) 1 comprimido de 400mg al día después del desayuno o almuerzo. Se le indica por 12 días continuos, esto con el objetivo de la Prueba Terapéutica para sustentar que existe Persistencia Viral. Si el paciente logra una mejoría en sus síntomas de 40% a más, o de 4 a más puntos de 10, la Prueba Terapéutica es POSITIVA.**
3) **DIETA: Baja en Histamina, Níquel y Arginina. Ver detalles de esta dieta en: https://www.researchgate.net/publication/366411787**

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. “Prueba Terapéutica” con Sofosbuvir como ayuda al diagnóstico de Persistencia Viral en Long COVID, COVID Persistente o Síndrome Post COVID Agudo (PACS) y en SFC/EM. ResearchGate. 10 de Junio 2023.

"THERAPEUTIC TEST" WITH SOFOSBUVIR TO ASSIST THE DIAGNOSIS OF VIRAL PERSISTENCE IN LONG COVID OR POST ACUTE COVID SYNDROME (PACS) AND IN ME/CFS. We also indicate this Test for Post-Vaccine COVID Syndrome (PVACS), Injury Vaccine or Post-Vaccine Persistent Symptoms.

FIRST: Answer at home, the questionnaire of the HHM Test (Hypoperfusion, Hypercoagulability and Microclots) available free of charge at: https://www.researchgate.net/publication/362634538

There is a direct correlation between the score obtained in the HHM Test, with a greater presence of Microclots (which are like Biofilms located in the blood vessels = BioClots), which in turn correlates with a higher Viral and/or Microbial Load.

CLINICAL CLASSIFICATION OF THE CHRONIC DISEASE OR SYNDROME ACCORDING TO THE RESULT OBTAINED IN THE HHM TEST:

10 or more points: with this score it is supported to give the Clinical Diagnosis of an HHM Syndrome associated with the presence of Microclots and Viral Persistence. In these cases it is justified to carry out the Therapeutic Test with Sofosbuvir or another Antiviral.

Between 6 to 9 points: the Risk/Benefit of performing the Therapeutic Test on the patient must be evaluated individually.

Less than 6 points: other causes should be investigated, since there are less chances of Viral Persistence.

SECOND: Ask the patient if he has symptoms or a pathological history of allergies, asthma, allergic rhinitis or pharyngitis or dermatitis, MCAS and other diseases characterized by the presence of hypersensitivity or hyperreactivity, that is, the patient's body overreacts to external agents that may be microorganisms or particles of these, nickel or other metals, vaccines, toxins or others. If the patient has this history, he will be classified as a patient with Hypersensitivity or Hyperreactivity.

THIRD: PROTOCOL TO INDICATE. In all cases, the initial Protocol will include at least the following:

1) **ANTIPLATELET**: It is indicated only the first 3 days: Acetylsalicylic Acid (Aspirin, other brands) 325mg after lunch. If you are a patient with Hypersensitivity, the alternatives are: Clopidogrel 75mg/día or, Ginger 1,100 mg every 12 hours or, Taxifolin 0.8 to 1mg/kg/day.
2) **ANTIVIRAL**: From the 4th day the following is indicated: Sofosbuvir (alone or with another antiviral) one 400 mg tablet per day, after breakfast or lunch. It is indicated for 12 continuous days, this with the objective of the Therapeutic Test to support that there is Viral Persistence. If the patient improves his symptoms by 40% or more, or 4 or more points out of 10, the Therapeutic Test is POSITIVE.
3) **DIET**: Low in Histamine, Nickel and Arginine. For more details, see at: https://www.researchgate.net/publication/366412536

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. "Therapeutic Test" with Sofosbuvir to assist the diagnosis of Viral Persistence in Long COVID or Post Acute COVID Syndrome (PACS) and in ME/CFS. ResearchGate. June 10, 2023.

“THERAPEUTISCHER TEST” MIT SOFOSBUVIR ZUR UNTERSTÜTZUNG DER DIAGNOSE VON VIRALER PERSISTENZ BEI LONG COVID ODER POST-AKUTEM COVID-SYNDROM UND BEI ME/CFS.

Wir empfehlen diesen Test auch für das Post-Vac COVID-Syndrom oder anhaltende Symptome nach der Impfung.

ZUERST : Beantworten Sie zu Hause den Fragebogen des HHM-Tests (Hypoperfusion, Hyperkoaguläbilität und Mikroklumpen), der kostenlos verfügbar ist unter: https://www.researchgate.net/publication/363474905 Es besteht ein direkter Zusammenhang zwischen der im HHM-Test erzielten Punktzahl und einem größeren Vorhandensein von Mikroklumpen oder Microclots (die wie Biofilme der Blutgefäße wirken= BioKlumpen oder BioClots), die wiederum mit einer größeren Belastung korrelieren: viral und/oder mikrobiell.

KLINISCHE KLASSIFIZIERUNG DER CHRONISCHEN KRANKHEIT ODER DES SYNDROMS NACH DEM ERGEBNIS DES HHM-TESTS:

10 oder mehr Punkte: Mit dieser Punktzahl wird die klinische Diagnose eines HHM-Syndroms unterstützt, das mit dem Vorhandensein von Mikrogerinnseln und Viruspersistenz verbunden ist. In diesen Fällen ist es gerechtfertigt, den Test oder die therapeutische Herausforderung mit Sofosbuvir oder einem anderen antiviralen Mittel durchzuführen.

Zwischen 6 und 9 Punkten: Das Risiko/der Nutzen der Durchführung des therapeutischen Tests muss individuell bewertet werden.

Weniger als 6 Punkte: Andere Ursachen sollten untersucht werden, da die Wahrscheinlichkeit einer Viruspersistenz geringer ist.

ZWEITENS: Fragen Sie den Patienten, ob er Symptome oder eine pathologische Vorgeschichte von Allergien, Asthma, Rhinitis, Pharyngitis oder allergischer Dermatitis, MCAS und anderen Krankheiten haben, die durch das Vorhandensein von Überempfindlichkeit oder Hyperreaktivität gekennzeichnet sind. Das heißt, dass der Körper des Patienten reagiert übermäßig auf äußere Einflüsse, bei denen es sich um Mikroorganismen oder Partikel handeln kann davon Nickel oder andere Metalle, Impfstoffe, Toxine oder andere. Wenn der Patient diese Vorgeschichte hat, wird er als Patient mit Überempfindlichkeit eingestuft.

DRITTE: PROTOKOLL DAS ZU BEFOLGEN IST. In allen Fällen umfasst das Einleitungsprotokoll mindestens Folgendes:

1) Thrombozytenaggregationshemmer: Nur in den ersten 3 Tagen angezeigt: Acetylsalicylsäure (Aspirin) 325mg nach dem Mittagessen. Bei Überempfindlichkeit sind die Alternativen: Clopidogrel 75 mg/Tag; Ingwer 1,100mg alle 12 Stunden; Taxifolin 0,8 bis 1 mg/kg/Tag.

2) Antiviral: Ab dem 4. Tag ist Folgendes angezeigt: SOFOSBUVIR (allein oder mit einem anderen antiviralen Mittel) eine 400-mg-Tablette täglich nach dem Frühstück oder Mittagessen. Es ist für 12 aufeinanderfolgende Tage indiziert, mit dem Ziel dieses therapeutischen Tests, das Vorliegen einer Viruspersistenz zu belegen. Wenn der Patient eine Verbesserung seiner Symptome um 40 % oder mehr oder 4 oder mehr von 10 Punkten erreicht, ist der therapeutische Test oder die Herausforderung POSITIV.

3) Diät: Gering Histamin, Nickel und Arginin. Einzelheiten zu dieser Diät finden Sie in: https://www.researchgate.net/publication/366485322

Quelle: Aguirre-Chang, Gustavo und Trujillo F., Aurora. “Therapeutischer Test” mit Sofosbuvir zur Unterstützung der Diagnose von Viraler Persistenz bei Long COVID oder Post-akutem COVID-Syndrom (PACS) und bei ME/CFS. ResearchGate. 10. Juni 2023.

PLAN TERAPÉUTICO PARA COVID AGUDO Y CRÓNICO

3 OBJETIVOS O LÍNEAS DE ACCIÓN DEL PLAN TERAPÉUTICO

1) **REDUCIR LA CARGA VIRAL.**
2) **REDUCIR LA HIPERACTIVIDAD PLAQUETARIA Y DESCOMPONER LOS COÁGULOS SANGUÍNEOS PERSISTENTES Y BIOFILMS.**
3) **TRATAR LA DEPLECIÓN DE NUTRIENTES, EL ESTRÉS OXIDATIVO Y LAS DISFUNCIONES INMUNES.**

Para cada Línea de Acción se establecen:

- **Medidas No Farmacológicas.**
- **Medidas Farmacológicas.**

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. COVID por Variantes: Plan Terapéutico en la Etapa Inicial (o Nasal y Faríngea con frecuente compromiso Intestinal). Parte I: Medidas No Farmacológicas. ResearchGate. 20 de Enero del 2021.

THERAPEUTIC PLAN FOR ACUTE AND CHRONIC COVID

3 OBJECTIVES OR LINES OF ACTION OF THE THERAPEUTIC PLAN

1) **REDUCE THE VIRAL LOAD.**
2) **REDUCE PLATELET HYPERACTIVITY AND BREAK DOWN PERSISTENT BLOOD CLOTS AND BIOFILMS.**
3) **TREAT NUTRIENT DEPLETION, THE OXIDATIVE STRESS AND IMMUNE DYSFUNCTIONS.**

For each Line of Action, the following are established:

- **Non-Pharmacological Measures.**
- **Pharmacological Measures.**

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. COVID by Variants: Therapeutic Plan in the Initial Stage (or Nasal and Pharyngeal with frequent intestinal commitment). Part I. Non-Pharmacological Measures. ResearchGate. January 20, 2021.

PLAN TERAPÉUTICO PARA EL SINDROME DE FATIGA CRÓNICA/ ENCEFALOMIELITIS MIÁLGICA, FIBROMIALGIA, ARTRITIS REUMATOIDE, SÍNDROME DE SJÖGREN, LUPUS, MIOSITIS, OTRAS ENFERMEDADES AUTOINMUNES Y OTRAS ENFERMEDADES CON FATIGA Y/O DOLOR CRÓNICO

- **3 OBJETIVOS O LÍNEAS DE ACCIÓN DEL PLAN TERAPÉUTICO**

1) **REDUCIR LA CARGA VIRAL Y/O MICROBIANA.**
2) **DESCOMPONER LOS BIOFILMS Y BIOCOÁGULOS PERSISTENTES Y REDUCIR LA HIPERACTIVIDAD PLAQUETARIA.**
3) **TRATAR LA DEPLECIÓN DE NUTRIENTES, DE HORMONAS Y OTRAS SUSTANCIAS, EL ESTRÉS OXIDATIVO Y LAS DISFUNCIONES INMUNES.**

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. Plan Terapéutico para Pacientes con Síndrome de Fatiga Crónica/ Encefalomielitis Miálgica (SFC/EM), Fibromialgia, Artritis Reumatoide, Síndrome de Sjögren, Lupus, Miositis, otras Enfermedades Autoinmunes y otras enfermedades con fatiga y/o dolor crónico. ResearchGate. Julio del 2022. https://www.researchgate.net/publication/362389442

THERAPEUTIC PLAN FOR MYALGIC ENCEPHALOMYELITIS/ CHRONIC FATIGUE SYNDROME (ME/CFS), FIBROMYALGIA, RHEUMATOID ARTHRITIS, SJÖGREN SYNDROME, LUPUS, MYOSITIS, OTHER AUTOIMMUNE DISEASES AND OTHER DISEASES WITH CHRONIC FATIGUE AND/OR PAIN

3 OBJETIVES OR LINES OF ACTION OF THE THERAPEUTIC PLAN

1) REDUCE THE VIRAL/MICROBIAL LOAD.
2) BREAK DOWN BIOFILMS AND PERSISTENT BIOCLOTS AND REDUCE PLATELET HYPERACTIVITY.
3) TREAT DEPLETION OF NUTRIENTS, HORMONES AND OTHER SUBSTANCES, THE OXIDATIVE STRESS AND IMMUNE DYSFUNCTIONS.

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. Therapeutic Plan for patients with Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome (ME/CFS), Fibromyalgia, Rheumatoid Arthritis, Sjögren Syndrome, Lupus, Myositis, other Autoimmune Diseases and other diseases with chronic fatigue and/or pain. ResearchGate. July 2022. https://www.researchgate.net/publication/362405138

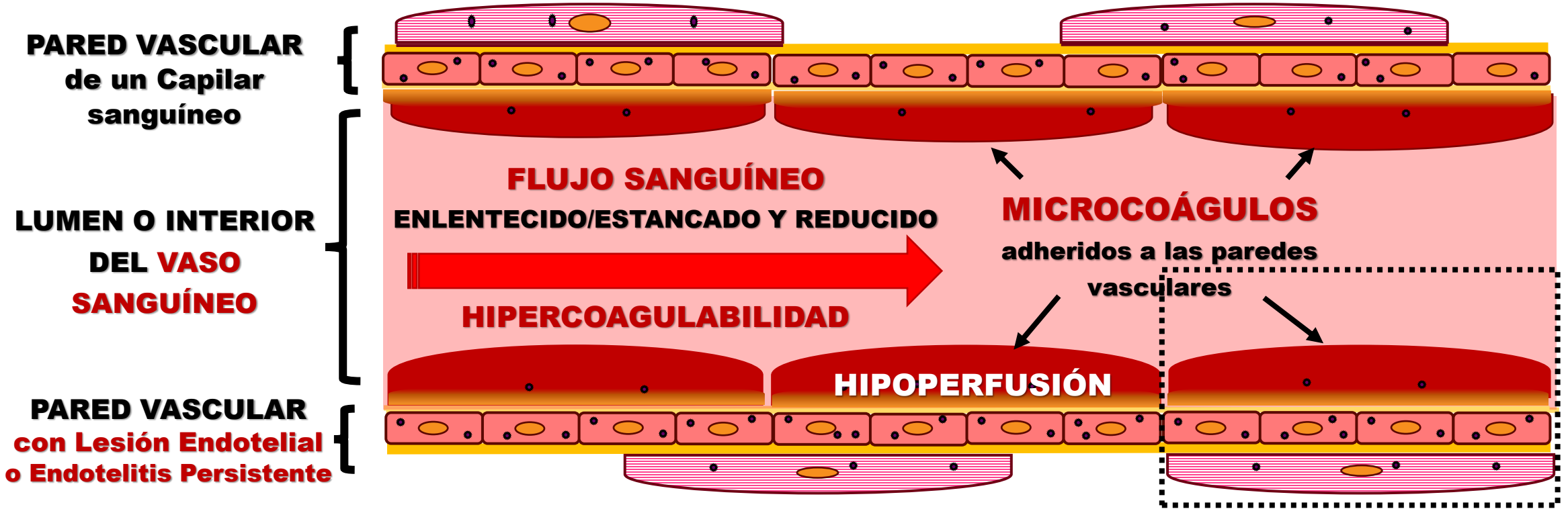
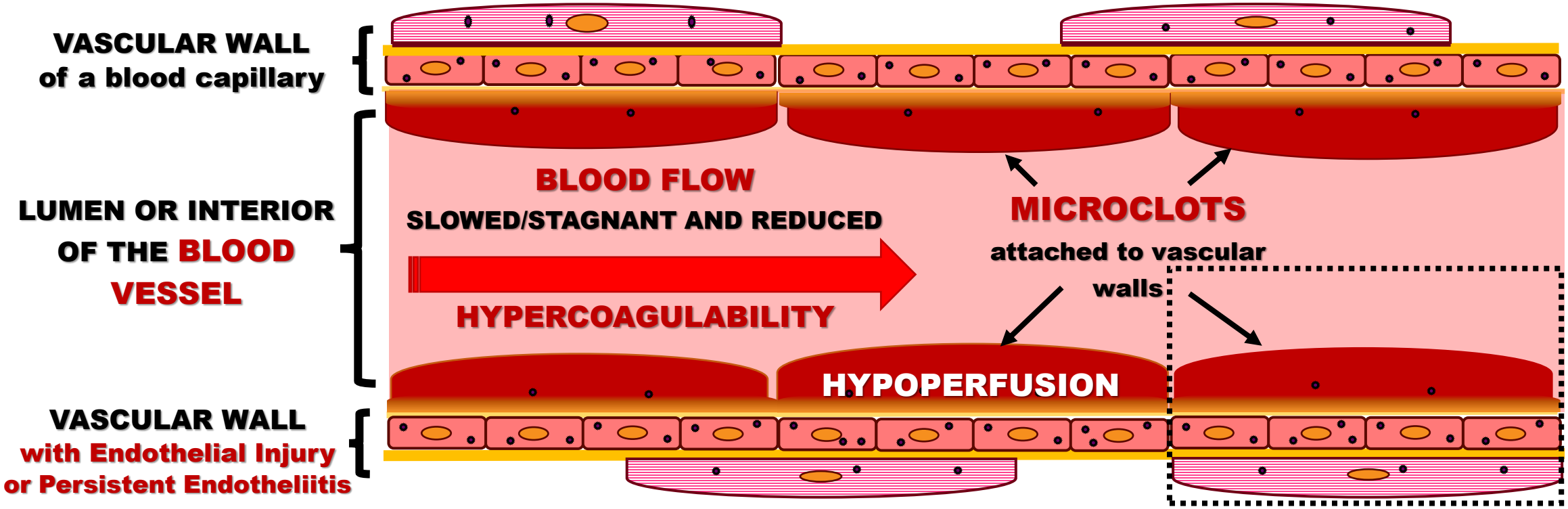


Gráfico 1. Imagen de un corte longitudinal de un Capilar sanguíneo que muestra Microcoágulos Persistentes adheridos a las paredes vasculares. La presencia de Coágulos, por un lado ocasiona un Flujo Sanguíneo enlentecido en velocidad y reducido en volumen, con Hipercoagulabilidad e Hipoperfusión, y por otro lado, los Microcoágulos sirven de barrera o pared protectora a los microorganismos, creándoles un refugio en el cual pueden persistir evadiendo la acción del sistema inmunológico y de los medicamentos contra la Carga Microbiana. Por cumplir una función similar a como lo hacen los Biofilms, proponemos denominarlos BioCoágulos. Su presencia diseminada explica los síntomas que se presentan en el Síndrome Post COVID Aguda (PACS) o COVID Persistente y en subgrupos del SFC/EM, Fibromialgia (FM) y Enfermedades Autoinmunes.
Él Área punteada del lado derecho se detalla en el Gráfico 2.
Fuente: Aguirre-Chang, Gustavo y Trujillo Aurora. El Virus SARS CoV-2 y otros Microorganismos usan los Microcoágulos como refugio para protegerse y persistir. ResearchGate. Julio del 2021.



Graphic 1. Image of a longitudinal section of a blood capillary showing Persistent Microclots adhered to the vascular walls. The presence of clots, on the one hand, causes a blood flow that is slowed down in speed and reduced in volume, with Hypercoagulability and Hypoperfusion, and on the other hand, Microclots serve as a barrier or protective wall to microorganisms, creating a refuge in which they can persist by evading the action of the immune system and drugs against the Microbial Load. Because they fulfill a function similar to that of Biofilms, we propose call them BioClots. Its widespread presence explains the symptoms that occur in Post-Acute COVID Syndrome (PACS) or Long COVID and in subgroups of ME/CFS, Fibromyalgia (FM) and Autoimmune Diseases. The dotted area on the right side is detailed in Graphic 2.

Source: Aguirre-Chang, Gustavo, and Trujillo Aurora. The SARS CoV-2 Virus and other Microorganisms use Microclots as a refuge to protect and persist. ResearchGate. July 2021.

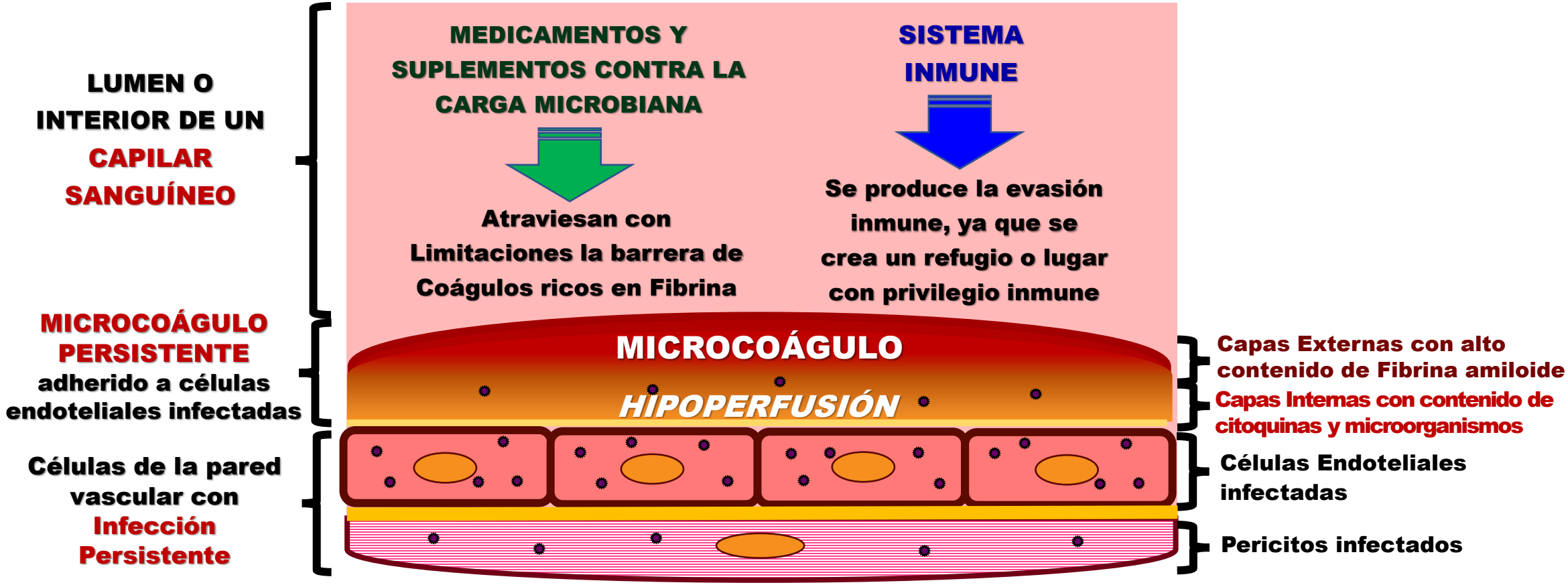
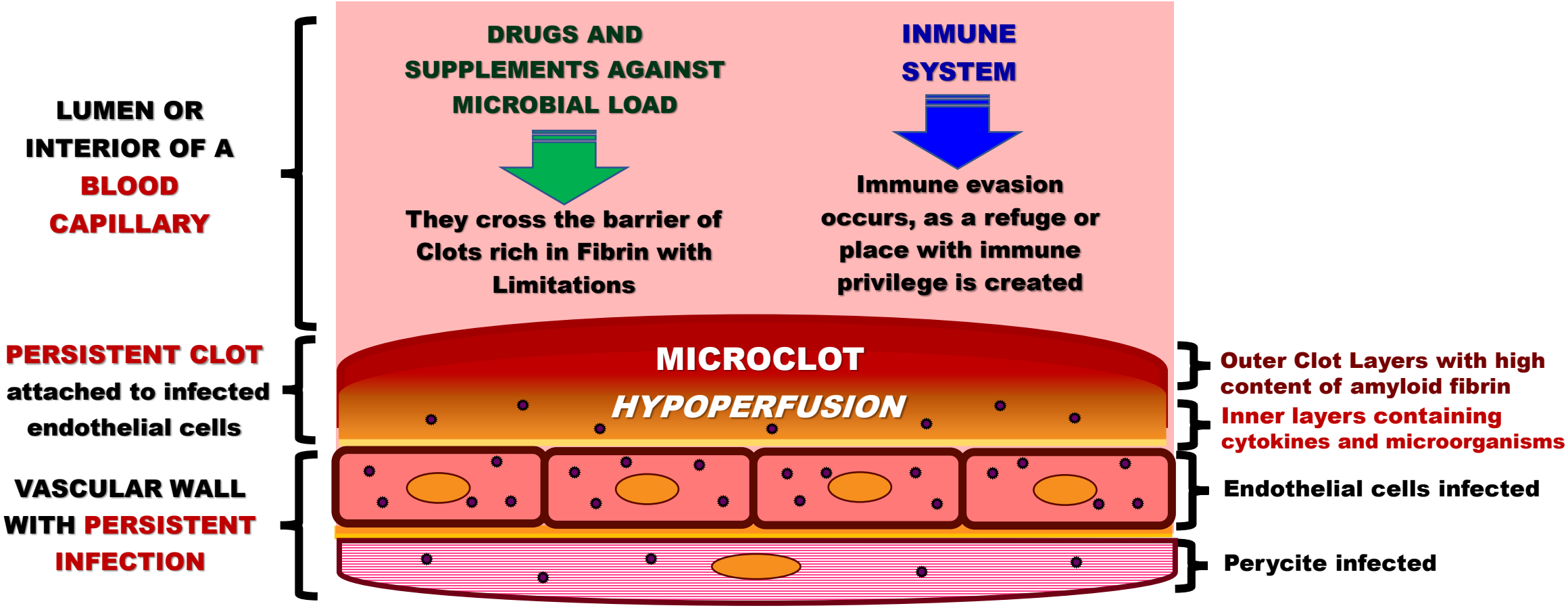


Grafico 2. Imagen de un corte longitudinal de un Capilar Sanguíneo que muestra un Microcoágulo Persistente adherido a las células endoteliales infectadas. Estos Coágulos le sirven a los microorganismos como barrera protectora bajo el cual se crea un refugio (que le permite evadir el Sistema Inmune y el efecto de los medicamentos contra la Carga Microbiana) por lo que los denominamos BioCoágulos. Estos están presentes en el Síndrome Post COVID Aguda (PACS) o COVID Persistente y en subgrupos de pacientes con SFC/EM, FM y Enfermedades Autoinmunes. Hemos observado una asociación entre la presencia de síntomas de hipoperfusión y microcoágulos como fatiga, niebla mental, taquicardia, fasciculaciones, entumecimiento de manos, piernas pesadas y sueño no-reparador, y la presencia de infecciones intracelulares persistentes (que lesionan e inflaman las células endoteliales) como causa desencadenante. Fuente: Aguirre-Chang, Gustavo y Trujillo Aurora. El Virus SARS CoV-2 y otros Microorganismos usan los Microcoágulos como refugio para protegerse y persistir. ResearchGate. Julio del 2021.



Graphic 2. Image of a longitudinal section of a blood capillary showing a Persistent Microclot attached to infected endothelial cells. These clots serve microorganisms as a protective barrier under which a refuge is created (which allows them to evade the Immune System and the effect of drugs against the Microbial Load) which is why we call them BioClots. These are present in Post-Acute COVID Syndrome (PACS) or Long COVID and in subgroups of patients with ME/CFS, Fibromyalgia and Autoimmune Diseases. We have observed an association between the presence of symptoms of hypoperfusion and microclots such as fatigue, brain fog, tachycardia, fasciculations, numbness in the hands, heavy legs and non-restorative sleep, and the presence of Persistent Intracellular Infections (which injure and inflame endothelial cells) as the triggering cause.

Source: Aguirre-Chang, Gustavo, and Trujillo Aurora. The SARS CoV-2 Virus and other Microorganisms use Microclots as a refuge to protect and persist. ResearchGate. July 2021.

Hemos creado un Cuestionario que el paciente puede aplicar en casa, y con el que en pocos minutos se puede realizar el Diagnóstico Clínico de la presencia de Síntomas asociados a Hipoperfusión y Microcoágulos, y proponemos el uso de este Cuestionario para la clasificación de Crónicos Patologías como el Síndrome de Fatiga Crónica, Artritis, Enfermedades Autoinmunes, POTS y muchas otras enfermedades crónicas.

TEST PARA EL DIAGNÓSTICO DE SÍNTOMAS DE HIPOPERFUSIÓN, HIPERCOAGULABILIDAD Y MICROCOÁGULOS (HHM) – TEST DE HHM v1.4

Aguirre-Chang, Gustavo y Trujillo F., Aurora. ResearchGate. 11 de Agosto, 2022.

Este Test es de utilidad en pacientes con COVID Persistente o Síndrome Post-COVID Aguda (PACS), Sínd. Post-Vacuna COVID (PVACS), SFC/EM (Sínd. de Fatiga Crónica/ Encefalomielitis Miálgica), Fibromialgia (FM), Sensibilidad Química Múltiple (SQM), Artritis Reumatoide (AR), S. de Sjögren (SS), S. Antifosfolipídico (SAF), LES, Miositis, Esclerodermia, Enf. Autoinmunes, POTS, S. de Ehlers-Danlos (SED), S. de Piernas Inquietas, S. de Calambres-Fasciculaciones, BFS (S. de Fascic. Benígnas), S. Neuropsiquiátrico de inicio agudo pediátrico (PANS), S. de la Persona Rígida (SPR), Neuropatia de Fibras Pequeñas (SFN), FDN, Insuficiencia o Fatiga Adrenal, Trastornos Tiroideos, Diabetes, EBV, HHV-6, CMV, Lyme, Bartonella, Micoplasma, Toxoplasma, Babesia, Rickettsias, Disbiosis, EII, Déficit de Vitamina D, de Vitaminas del Complejo B, Cáncer y otras enfermedades con fatiga y/o dolor crónico. También se recomienda en personas aparentemente sanas, ya que pueden tener estos síntomas y no los ha tomado en cuenta. Con este Test el mismo paciente, sus familiares o médicos tratantes, pueden identificar de forma rápida, en casa y sin costo, estos síntomas. Si resulta con 10 o más puntos en el Test de HHM, se haría el diagnóstico clínico de un Síndrome de Hipoperfusión, Hipercoagulabilidad y Microcoágulos (**SHHM**), el cual es debido a endotelitis crónica, y el puntaje de este Test se correlaciona con la cantidad de Microcoágulos y el nivel de Carga Viral y/o Microbiana.

Nombre:..... Edad:..... Sexo: M( ), F( ) Peso:..... Fecha:.....

1. SIGNOS DE HIPOPERFUSIÓN E HIPERCOAGULABILIDAD EN MANOS Y PIES.

En los últimos 6 meses ha tenido en las manos o pies alguno de los siguientes signos:

- Piel de color azulado o violáceo o debajo de las uñas (por cianosis) o piel moteada con áreas azuladas y áreas pálidas o blanquecinas, o el fenomeno de Raynaud.

We have created a Questionnaire that the patient can apply at home, and with which in a few minutes the Clinical Diagnosis of the presence of Symptoms associated with Hypoperfusion and Microclots can be made, and we propose the use of this Questionnaire for the classification of Chronic Pathologies including Chronic Fatigue Syndrome, Arthritis, Autoimmune Diseases, POTS and many other chronic diseases.

TEST FOR THE DIAGNOSIS OF SYMPTOMS OF HYPOPERFUSION, HYPERCOAGULABILITY AND MICROCLOTS – HHM TEST v1.3

Aguirre-Chang, Gustavo and Trujillo F., Aurora. ResearchGate. August 11, 2022.

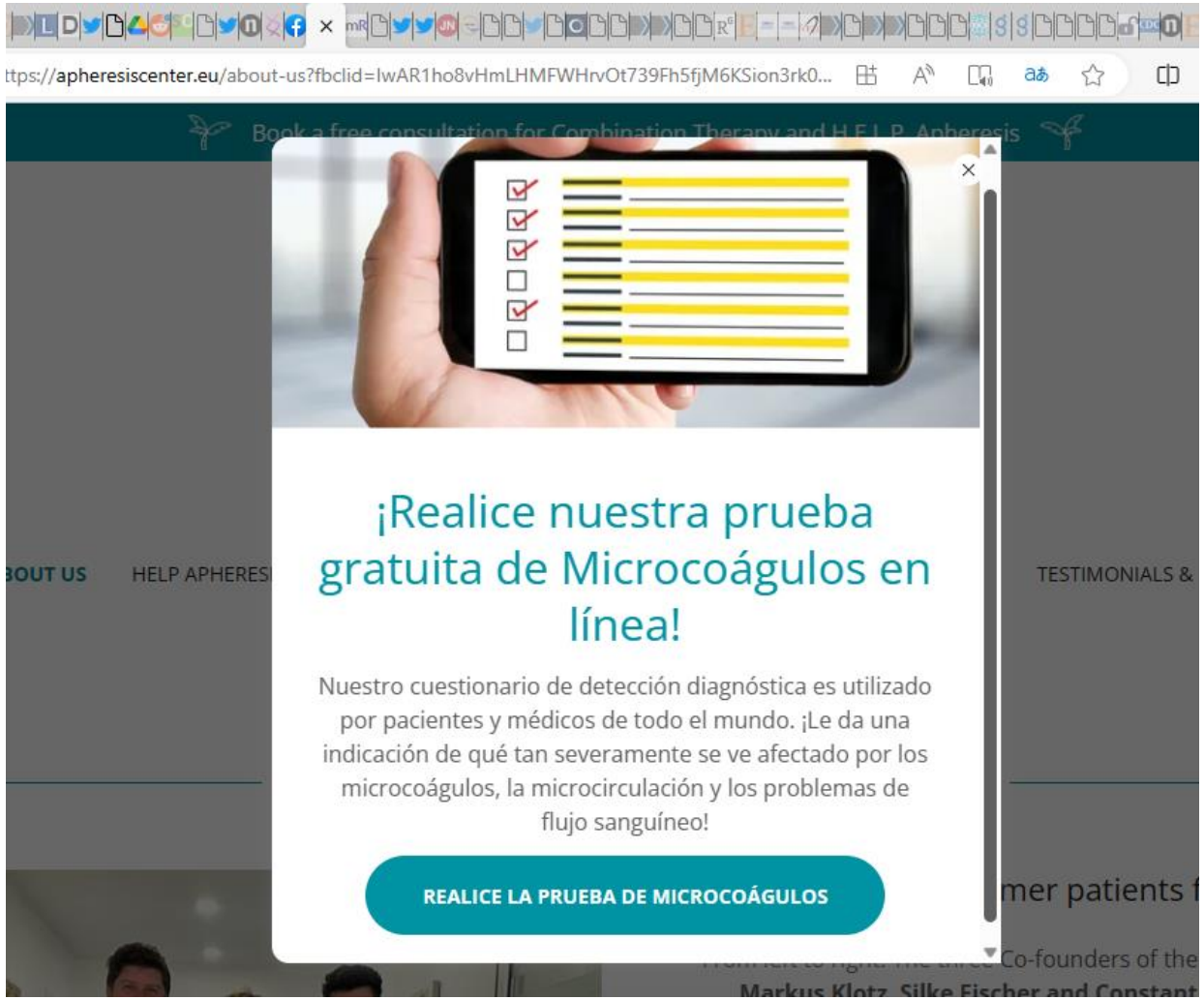
This Test is useful for patients with ME/CFS (Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome), Fibromyalgia (FM), Multiple Chemical Sensitivity (MCS), Post-Acute COVID Syndrome (PACS) or Long COVID, Post-Vaccine COVID Syndrome (PVACS), Rheumatoid Arthritis (RA), Sjögren's Syndrome (SS), Antiphospholipid Syndrome (APS), Lupus (SLE), Myositis, Scleroderma, POTS, Ehlers-Danlos S. (EDS), Restless Legs S. (RLS), Cramp-Fasciculation S., Pediatric Acute Onset Neuropsychiatric Synd. (PANS), Stiff Person Syndrome (SPS), Small Fiber Neuropathy (SFN), FDN, Adrenal Insufficiency or Fatigue, Thyroid Disorders, Diabetes, EBV, HHV-6, CMV, Lyme, Bartonella, Mycoplasma, Toxoplasma, Babesia, Rickettsiae, Dysbiosis, IBD, Vitamin D Deficiency, B Complex Vitamin Deficiency, Cancer and others diseases that present chronic fatigue and/or pain. It is also recommended in apparently healthy people, as they may have these symptoms and have not taken them into account. With this test, the patient himself, his relatives or treating doctors, can quickly identify these symptoms at home at no cost. If it results with more than 8 points in the Test, a clinical diagnosis of Hypoperfusion, Hypercoagulability and Microclots Syndrome (**HHMS**) would be made, which is due to chronic endothelitis, and the score of this Test is correlated with the amount of Microclots and the level of Viral or Microbial Load.

Name:..... Age:..... Sex: M( ), F( ) Weight:..... Date:.....

1. SIGNS OF HYPOPERFUSION AND HYPERCOAGULABILITY IN HANDS AND FEET.

   In the last 6 months, have you presented any of the following signs in your hands or feet:

   - Cyanotic, bluish or purplish skin, or cyanosis under the nails, or mottled skin with bluish or purplish areas and pale or whitish areas.
   - Dark red or violaceous skin lesions located in the distant areas of the fingers, which are similar to Erythema pernio, Perniosis or Chilblains.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Book a free consultation for Combination Therapy and H.E.L.P. Apheresis
BOUT US
HELP APHERES
TESTIMONIALS &
¡Realice nuestra prueba gratuita de Microcoágulos en línea!
Nuestro cuestionario de detección diagnóstica es utilizado por pacientes y médicos de todo el mundo. ¡Le da una indicación de qué tan severamente se ve afectado por los microcoágulos, la microcirculación y los problemas de flujo sanguíneo!
REALICE LA PRUEBA DE MICROCOÁGULOS
mer patients f
Co-founders of the

https://apheresiscenter.eu/about-us?fbclid=IwAR1ho8vHmLHMFWHrvOt739Fh5fjM6KSion3rk0r_iqdI...

Book a free consultation for Combination Therapy and H.E.L.P. Apheresis

Take our free Microclots Online Test!

Our diagnostic screening questionnaire is used by patients and clinicians all over the world. It gives you an indication on how severely you are affected by microclots, microcirculation and blood flow issues!

TAKE THE MICROCLOTS TEST

ABOUT US HELP APHERES TESTIMONIALS

mer patient

From left to right: The three Co-founders of t

MANEJO DEL PACIENTE CON COVID PERSISTENTE, LONG COVID O SÍNDROME POST COVID AGUDA (PACS) Y DEL PACIENTE CON SÍNDROME POST-VACUNA COVID (PVACS)

Pasos a seguir progresivamente para el Diagnóstico y Tratamiento

• 1er Paso

CLASIFICACIÓN según presencia/severidad de SÍNTOMAS de HHM: de HIPOPERFUSIÓN Y MICROCOÁGULOS (Aplicar Test de HHM) e identificar si hay HIPERSENSIBILIDAD. Y, solicitar: PCR de: 1) Sangre centrifugada, 2) De cepillado nasal, 3) De heces; y PANEL BÁSICO DE ANÁLISIS para HHM: 1) Dímero-D, 2) Gases en sangre Venosa, 3) Hemograma con Frotis de Sangre Periférica, 4) Cortisol de las 8am, 5) Lactato, 6) Viscosidad sanguín.

2do Paso

Aplicación de la PRUEBA TERAPÉUTICA con medicamentos contra la Carga Viral como ayuda al diagnóstico de PERSISTENCIA VIRAL. Si hay una mejoría del 40% o más en los síntomas, la prueba es POSITIVA, y continua el tratamiento hasta 15 días después de lograr la mejoría total. Si no mejora del todo: continua hasta un máximo 24 días en total.

3er Paso

Si persisten síntomas: REEVALUAR SÍNTOMAS DE HHM: HIPOPERFUSIÓN. Si hay, pasar al 4to Paso, o puede optar por realizar la Prueba Terapéutica para el diagnóstico de COÁGULOS PERSISTENTES. Esta es POSITIVA si: a) Hay mejoría de síntomas ≥ 30% o 3 de 10 puntos; y/o b) Dímero-D sube + de 30%, y/o c) SvO2 mejora significativamente. Antes del Test, Evaluar el riesgo de hemorragias.

4to Paso

Aplicar ESQUEMA DE TRATAMIENTO 3-3-3 para Carga Viral Drogo-Resistente con 3 medicamentos de c/u de las 3 Líneas de Acción del Plan. Si hay Hipoperfusión moder. o severa aplicar un Esquema 5-5-5, 7-7-7, 6-9-9 Si hay una mejoría de 40% o más, continuar con el tratamiento hasta 30 días más de la total mejoría, o máximo 60 días en total. Si no hay mayor mejoría con solo medicamentos, incluir OZONO de Altas Dosis/10-Pass u otro proc.

5to Paso

REEVALUAR SÍNTOMAS DE HHM: HIPOPERFUSIÓN, si persisten, considerar Co-infecciones múltiples con Drogo-Resistencia y Biofilms. Se recomienda: 1) Dar tratamiento para la Disbiosis Intestinal. Incluir tomar Bacillus subtilis. 2) OZONO de Altas Dosis y/u otro procedimiento. 3) Atención por Odontólogo para eliminar posibles focos infecciosos. Además, realizar test para: EVB, HHV-6, otros, y para Alergia al Niquel.

6to Paso

ELIMINACIÓN DE BIOCOÁGULOS, BIOFILMS Y CARGA VIRAL MUY PERSISTENTES aplicando: 1) HELP AFÉRESIS y/o otra terapia para la eliminación mecánica de BioCoágulos (exanguineo transfusión parcial, otro) 2) OZONOTERAPIA de Altas Dosis y HOCTT. 3) Esquema/Protoc. para CARGA MICROBIANA Multi-Drogo Resistente (MDR) y encubierta en BioCoágulos, Biofilms y BioAmiloide: por meses. 4)Otros: Cél.Madre, T CAR

% de casos con mejoría muy significativa o mejoría total al terminar el Paso: 55-70% | 70-80% | 80-92%

En cada Paso se debe buscar identificar otras patologías No causadas directamente por una Infección Persistente por el SARS CoV-2. Se debe investigar:

- ➢Coinfección/Reactivación: Herpesvirus (EBV,HHV-6 y 7,HSV-1,CMV,VZV), Borrelia burdorf, Bartonela, Babesia,Candida,Micoplasma, Ehrlichia,Anaplasma,Enterovirus,Parvovirus,etc
- ➢Depleción de nutrientes, hormonas y otros: Vitaminas B, D, C, A, E; Zn, Mg,Cu,Ge, Se, Fe.
- ➢Disbiosis o SIBO que ocasiona síntomas gastrointestinales y elevación del D-Lactato.
- ➢Alteración de otras Microbiomas: oral, vascular, en trombos, riñones, vias respir., cerebro
- ➢Biofilms/ focos infecciosos: placa dental, a nivel intestinal y otros.
- ➢Defectos genéticos asociados a hipercoagulabilidad o trombosis.
- ➢Células T agotadas, citotoxicidad, ↑ de NK y CD8, Linfopenia CD4, Baja cantidad de Anticuerpos neutralizant., Autoanticuerpos, ADE.
- ➢Secuelas: lesión con pérdida de células o tejidos y vasos sanguín.

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. Manejo del paciente con COVID Persistente, Long COVID o Síndrome Post COVID Aguda (PACS) y del paciente con Síndrome Post-Vacuna COVID (PVACS). Diagnóstico y Tratamiento. ResearchGate. 19 de Julio 2021.

MANAGEMENT OF THE PATIENT WITH LONG COVID OR POST-ACUTE COVID SYNDROME (PACS) AND OF THE PATIENT WITH POST-VACCINE COVID SYNDROME (PVACS)

Steps to follow progressively for Diagnosis and Treatment

• 1st Step

CLASSIFICATION according to the presence/severity of HHM SYMPTOMS: of HYPOPERFUSION and MICROCLOTS (apply HHM test) and identify if there is HIPERSENSITIVITY. And, request: PCR of: 1) Centrifuged Blood, 2) Nasal brushing, 3) Feces; and BASIC ANALYSIS PANEL FOR HHM: 1) D-dimer, 2) VBG: Venous Blood Gases, 3) CBC with Peripheral Blood Smear, 4) 8am Cortisol, 5) Lactate, 6) Blood Viscosity.

2nd Step

Application of the THERAPEUTIC TEST with drugs against Viral Load to assist the diagnosis of VIRAL PERSISTENCE. If there is an improvement of 40% or more in the symptoms, the Test is POSITIVE, and treatment continues for 15 days after achieving a total improvement. If it does not improve at all: continue for a maximum of 24 days in total.

3rd Step

If symptoms persist: RE-EVALUATE HHM SYMPTOMS: of HYPOPERFUSION. If there is, go to 4th Step, or you can choose to perform the: Therapeutic Tests for the diagnosis of PERSISTENT CLOTS. The Test is POSITIVE if: a) Symptoms improvement is ≥ 30%; and/or b) D-Dimer rises more than 30%; and/or c) SvO2 improves significantly. Before the Test, Assess the risk of bleeding.

4th Step

Apply TREATMENT Regime/Protocol 3-3-3 for Drug-Resistant Viral Load with 3 medications of each of the 3 Lines of Action of the Plan. If there Hypoperfusion moderate/ severe, is applied a 5-5-5, 7-7-7 or 6-9-9 Regime. If there is an improvement ≥40%, continue treatment for up to 30 days after total improvement is achieved or a maximum of 60 days in total. If there is no greater improvement with only medication, include High Dose OZONO or 10-pass, or other procedure.

5th Step

RE-EVALUATE SYMPTOMS OF HHM: of HYPOPERFUSION, if they persist, consider multiple Co-infections with Drug-Resistance and Biofilms. It is recommended: 1) Give treatment for Intestinal Dysbiosis. Include taking Bacillus subtilis. 2) High Dose OZONE and/or other procedure. 3) Attention by Dentist to eliminate possible sources of infection. Also, Test for: EVB, HHV-6, HSV-1, others, and for Nickel Allergy.

6th Step

ELIMINATION OF VERY PERSISTENT BIOCLOTS, BIOFILMS AND VIRAL LOAD applying: 1) HELP APHERESIS, and/or another therapy for mechanical removal of BioClots (Partial Exchange Transfusion,ot) 2) High Dose OZONO THERAPY and HOCTT. 3) Regime/ Protocol for Multi Drugs-Resistant (MDR) MICROBIAL LOAD and undercover in BioClots, Biofilms and BioAmyloid: for months. 4) Others: Stem Cells, CAR T cell,

% of cases with very significant improvement or total improvement at the end of the Step: 55-75% | 70-85% | 80-92%

In each Step, we must seek to identify other pathologies Not directly caused by a Persistent Infection by SARS CoV-2. It should be investigated to identify:

- Coinfection/Reactivation: Herpesvirus (EBV,HHV-6,HHV-7,HSV-1,CMV,VZV), Borrelia burd, Bartonela,Babesia,Candida,Mycoplasma,Ehrlichia,Anaplasma,Enterovirus,Parvovirus,oth.
- Depletion of nutrients, hormones, others: Vitamins B, D, C, A, E; Zn, Mg, Cu, Ge, Se, Fe.
- Dysbiosis or SIBO which causes gastrointestinal symptoms and elevation of D-Lactate.
- Alteration of other Microbiomes: oral, vascular, in clots, kidneys, respirat. tract, brain,..
- Biofilms/ infectious foci: dental plaque, at the intestinal level, other.
- Genetic defects associated with hypercoagulability or thrombosis.
- T-cell exhaustion, cytotoxicity, ↓ NK and CD8, CD4 Lymphopenia, Low amount of neutralizing antibodies, Autoantibodies, ADE.
- Sequelae: injury with loss of cells or tissues and blood vessels.

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. Management of the patient with Long COVID or Post-Acute COVID Syndrome (PACS) and of the patient with Post-vaccine COVID Syndrome (PVACS). Diagnosis and Treatment. ResearchGate. July 19, 2021.

EL SINDROME DE FATIGA CRÓNICA/ ENCEFALOMIELITIS MIALGICA, FIBROMIALGIA, ARTRITIS REUMATOIDE, SJÖGREN, LUPUS, OTRAS ENFERMEDADES AUTOINMUNES Y POTS SON CAUSADAS EN SU MAYOR PARTE POR INFECCIONES INTRACELULARES PERSISTENTES QUE AFECTAN PRINCIPALMENTE LOS VASOS SANGUÍNEOS

CAUSAS DESENCADENANTES

- INFECCIÓNES INTRACELULARES PERSISTENTES. Por: Herpesvirus (EVB, HHV-6 y 7), otros Virus, Bacterias, Parásitos y otros, en:
  1) Células Endoteliales.
  2) Cél. Sanguíneas, plaquet.
  3) Biofilms: oral, intes., otros
  4) Reservorios o lugares con Privilegio inmune.
- Persistencia de Antígenos o partículas virales, bacterianos u otros.
- Toxinas, metales pesados.
- Traumatismo, injuria, estrés.

Factores Predisponentes:
- Pac.Hipersensible/Alérgico.
- Infección previa por EBV y/o x otros microorganism.
- Defectos genéticos o trastornos en la coagulación.
- Microbiotas alteradas.
- Portadores de S. aureus.

EFECTOS ORGÁNICOS

- ENDOTELITIS CRÓNICA PERSISTENTE.
- Daño y Reducción del Glicocálix. ↑ SDC-1.
- Hipercoagulabilidad.
- BIOCOÁGULOS PERSISTENTES.
- Depósitos de Fibrina, de Amiloides y otras proteínas.
- Cambios físicos en las células sanguíneas.
- Incremento de: NETs y Vesículas extracelulares
- Incremento de Apoptosis y Piroptosis.

EFECTOS FUNCIONALES

- DISFUNCIÓN ENDOTELIAL. Hipoperfusión, Hipoxemia, Disoxia, DISFUNCIÓN MITOCONDRIAL. ↑ Lactato, Piruvato y L/P, ↑Calcio IC.
- Disfunción de Tiroides, Suprarrenales, otras
- Baja Saturación de Oxígeno Venosa: SvO2.
- Detención Persistente de la Fibrinolisis.
- Disminución de Glutation, Estrés oxidativo.
- Hiperactividad de: Plaquetas, Macrófagos, Neutrófilos, Monocitos, Mastocitos (contribuye a un MCAS). Induce Autoinmunidad.
- Disfunción de Linfocitos y sistema inmune.
- Sobrecrecimiento de S. aureus y otros micr.
- Disbiosis intestinal o SIBO. ↑D-Lactato.
- Alterac. de Microbiomas: oral, vascular, vías respiratorias, riñones, cerebro, otros.
- ↓actividad de Receptores α7 nAChR
- Histaminosis. Déficit o disfunción de DAO.

MANIFESTACIONES CLÍNICAS

Síntomas asociados a:
1) HIPOPERFUSIÓN y MICROCOÁGULOS: (implica menor aporte de oxígeno, de nutrientes, hormonas y otros): Fatiga, Malestar post-esfuerzo: PEM, Neblina mental, Frio en manos y píes, Rigidez, hormigueo y adormecimiento en manos al despertar, Sueño no restaurador: SNR, Fasciculaciones, Taquicardia, Visión borrosa, Síntomas de Insuficiencia Adrenal, Disnea.
2) HISTAMINOSIS: migraña, piel seca, urticaria, acúfenos.

EFECTOS

Fuente: Aguirre-Chang, Gustavo y Trujillo, Aurora. El Síndrome de Fatiga Crónica/Encefalomielitis Miálgica, Fibromialgia, Artritis reumatoide, Sjögren, Lupus, otras Enfermedades Autoinmunes y POTS son causadas en su mayor parte por infecciones intracelulares persistentes que afectan principalmente los vasos sanguíneos. ResearchGate. 5 de Octubre, 2021.

CHRONIC FATIGUE SYNDROME/MYALGIC ENCEPHALOMYELITIS, FIBROMYALGIA, RHEUMATOID ARTHRITIS, SJÖGREN'S, LUPUS, OTHER AUTOIMMUNE DISEASES AND POST ARE MOSTLY CAUSED BY PERSISTENT INTRACELLULAR INFECTIONS WHICH MAINLY AFFECT BLOOD VESSELS

TRIGGERING CAUSES

- PERSISTENT INTRACELLULAR INFECTIONS. For: Herpesvirus: EBV, HHV6-7, other Viruses, Bacteria, Parasites and others, in:
  1) Endothelial Cells.
  2) Blood cells/ Platelets.
  3) Biofilms:oral, int.,others
  4) Reservoirs/ Places with Immune Privilege.
- Antigens, viral or bacterial particles or components.
- Toxins, Heavy metals,other
- Trauma, injuries, stress.

Predisposing Factors:
- Hypersensitive/Allergic Pat.
- Genetic defects or bleeding disorders.
- Previous infection x EVB and/or other microorganis.
- Altered Microbiota.
- S. aureus carriers.

ORGANIC EFFECTS

- PERSISTENT ENDOTHELITIS.
- Glycocalyx damage and reduction. ↑SDC-1
- Hypercoagulability.
- PERSISTENT BIOCLOTS.
- Deposits of: Fibrin, Amyloid, other protein.
- Physical changes in blood cells.
- Increase of: NETs and Extracellular Vesicles.
- Increased Apoptosis and Pyroptosis.

FUNCTIONAL EFFECTS

- ENDOTHELIAL DYSFUNCTION.
- HYPOPERFUSION, HYPOXEMIA, DYSOXIA, MITOCHONDRIAL DYSFUNTION. ↑Lactate, Pyruvate and L/P. ↑Intracellular Calcium.
- Dysfunction of: Thyroid, Adrenal, others.
- Low Venous Oxygen Saturation: SvO2.
- Persistent Fibrinolysis Shutdown.
- ↓ Glutathione, Oxidative stress.
- Hyperactivity of: Platelets, Macrophages, Monocytes, Neutrophils, Mast Cells (contributes to an MCAS). Induces Autoimmunity.
- Lymphocyte and immune Dysfunction.
- Overgrowth of S. aureus and other microor.
- Intestinal Dysbiosis/SIBO. ↑D-Lactate.
- Alteration of Microbiota: oral, vascular, respiratory tract, kidneys, brain, others.
- ↓activity of: α7 nAChR Receptors.
- Histaminosis. DAO deficiency/dysfuntion.

CLINICAL MANIFESTATIONS

Symptoms associated with:
1) HYPOPERFUSION and MICROCLOTS: (implies lower supply of oxygen, nutrients, hormones, others): Fatigue and Post-Exertional Malaise: PEM, Brain fog, Cold hands and feet, Stiffness or lack of flexibility, Tingling or numbness in the hands upon awakening, Non-restorative sleep, Fasciculations, Blurred vision, tachycardia, symptoms associated with Adrenal Insufficiency, dyspnea.
2) HISTAMINOSIS: migraine, dry skin, hives, tinnitus.

EFFECTS

Source: Aguirre-Chang, Gustavo and Trujillo, Aurora. Chronic Fatigue Syndrome/ Myalgic Encephalomyelitis, Fibromyalgia, Rheumatoid Arthritis, Sjögren's, Lupus, other Autoimmune Diseases and POTS are mostly caused by persistent intracellular infections which mainly affect blood vessels. ResearchGate. October 5, 2021.

Thank you

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RESULTS OF THE APPLICATION OF THE "THERAPEUTIC TEST"
TO ASSIST THE DIAGNOSE OF PERSISTENT VIRAL INFECTION
IN 390 PATIENTS WITH POST ACUTE COVID PERSISTENT SYMPTOMS

% IMPROVEMENT OF THE SYMPTOM	% OF PATIENTS	RESULTING FROM THE "THERAPEUTIC TEST"
40% a 100%	83%	POSITIVE
5 a 39 %	11%	INTERMEDIATE
0 a 4%	6%	NEGATIVE

1 **We have created and promote the use of Therapeutic Tests to support the Diagnosis of Viral Persistence in patients with Long COVID and in Post-Vaccine COVID Syndrome.**

COVID-19: "THERAPEUTIC TEST" FOR PATIENTS WITH PERSISTENT SYMPTOMS OR LONG COVID

For Sub-Acute and Chronic COVID, Post-Acute COVID Syndrome, Post-Acute Sequelae or Persistent COVID, Long haulers.

Antiplatelet **ASA** (Acetyl-salicylic acid)	**Days 1 to 7**: 100 mg after breakfast, lunch and dinner (300 mg per day). If they are 81 mg TB: take 162 mg (2 TB) at breakfast, 81 mg at lunch and dinner (324 mg/day). If it's 325 mg TB, take 1 a day. In those who weigh more than 95 kilos, take 600 to 650 mg a day, divided into 2 or 3 doses a day, after meals, x 7 days. Do not take more days without medical indication, due to the risk of bleeding.
Reduce Viral Load (I	Days 3 to 7: From 3rd day after starting ASA, take IVM between 0.2 and 0.3 mg per kilo of weight

POST-VACCINE COVID SYNDROME (PVACS) AND POST-VACCINE COVID PERSISTENT SYMPTOMS
FIRST TREATMENT PROTOCOL AND THERAPEUTIC TEST

For: Post-Vaccine COVID, Vaccine Injury, Post-Vaccine Syndrome, Post-Vaccine or Vaccine-induced Long COVID, Chronic PVACS.

For thrombophilia **ASA** (Aspirin)	**Days 1 to 6 of test**: 81 or 100mg after breakfast and dinner. For a weight greater than 95kg take 162 or 200mg for each intake. *Alternatives: LASA, Nattokinase, Lysine, Ginger, Serrapeptase, Lumbrokinase, Liposomal Glutathione.*
For Reactivations and Microbial Overgrowth	**Day 2 of test**: on the 2nd day the Protocol, IVM is indicated at a dose of 0.2mg for kilo of weight after dinner. Days 3 to 6: on the 3rd day the IVM dose is at 0.4 mg for kilo of weight after breakfast (or lunch) x 4 days. If the

Dr. GUSTAVO A. AGUIRRE CHANG

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BACKGROUND AND TRAINING

We have also created a Questionnaire that the patient can apply at home, and with which in a few minutes the Clinical Diagnosis of the presence of Symptoms associated with Hypoperfusion and Microclots can be made, and we propose the use of this Questionnaire for the classification of Chronic Pathologies including Chronic Fatigue Syndrome, Arthritis, Autoimmune Diseases, POTS and many other chronic diseases.

TEST FOR THE DIAGNOSIS OF SYMPTOMS OF HYPOPERFUSION, HYPERCOAGULABILITY AND MICROCLOTS – HHM TEST v1.3

Aguirre-Chang, Gustavo and Trujillo F., Aurora. ResearchGate. August 11, 2022.

This Test is useful for patients with ME/CFS (Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome), Fibromyalgia (FM), Multiple Chemical Sensitivity (MCS), Post-Acute COVID Syndrome (PACS) or Long COVID, Post-Vaccine COVID Syndrome (PVACS), Rheumatoid Arthritis (RA), Sjögren's Syndrome (SS), Antiphospholipid Syndrome (APS), Lupus (SLE), Myositis, Scleroderma, POTS, Ehlers-Danlos S. (EDS), Restless Legs S. (RLS), Cramp-Fasciculation S., Pediatric Acute Onset Neuropsychiatric Synd. (PANS), Stiff Person Syndrome (SPS), Small Fiber Neuropathy (SFN), FDN, Adrenal Insufficiency or Fatigue, Thyroid Disorders, Diabetes, EBV, HHV-6, CMV, Lyme, Bartonella, Mycoplasma, Toxoplasma, Babesia, Rickettsiae, Dysbiosis, IBD, Vitamin D Deficiency, B Complex Vitamin Deficiency, Cancer and others diseases that present chronic fatigue and/or pain. It is also recommended in apparently healthy people, as they may have these symptoms and have not taken them into account. With this test, the patient himself, his relatives or treating doctors, can quickly identify these symptoms at home at no cost. If it results with more than 8 points in the Test, a clinical diagnosis of Hypoperfusion, Hypercoagulability and Microclots Syndrome (**HHMS**) would be made, which is due to chronic endothelitis, and the score of this Test is correlated with the amount of Microclots and the level of Viral or Microbial Load.

Name:..... Age:..... Sex: M( ), F( ) Weight:..... Date:.....

1. SIGNS OF HYPOPERFUSION AND HYPERCOAGULABILITY IN HANDS AND FEET.

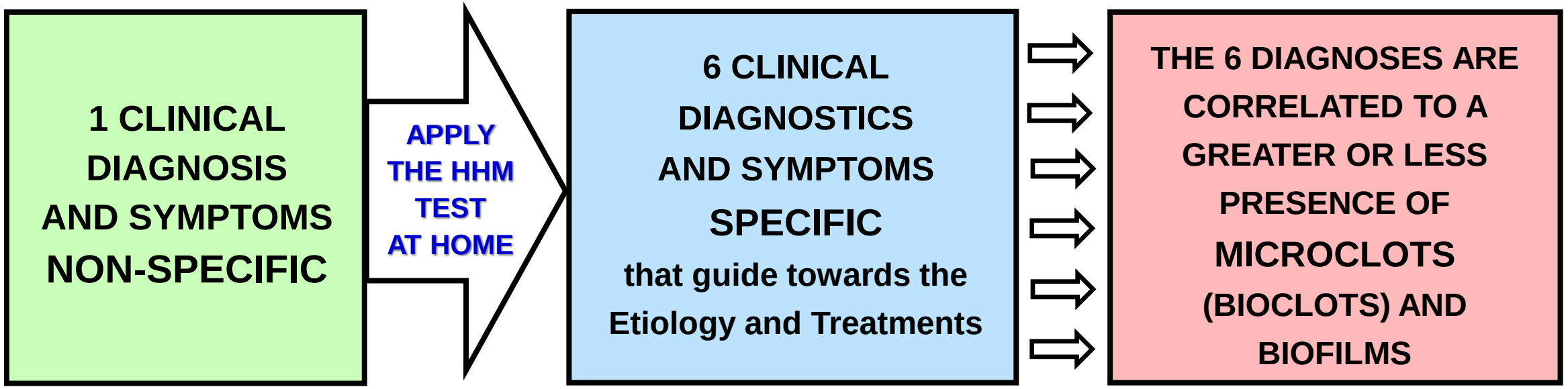
In the last 6 months, have you presented any of the following signs in your hands or feet:

- Cyanotic, bluish or purplish skin, or cyanosis under the nails, or mottled skin with bluish or purplish areas and pale or whitish areas.
- Dark red or violaceous skin lesions located in the distant areas of the fingers, which are similar to Erythema pernio, Perniosis or Chilblains.

Dr. GUSTAVO A. AGUIRRE CHANG

BACKGROUND AND TRAINING

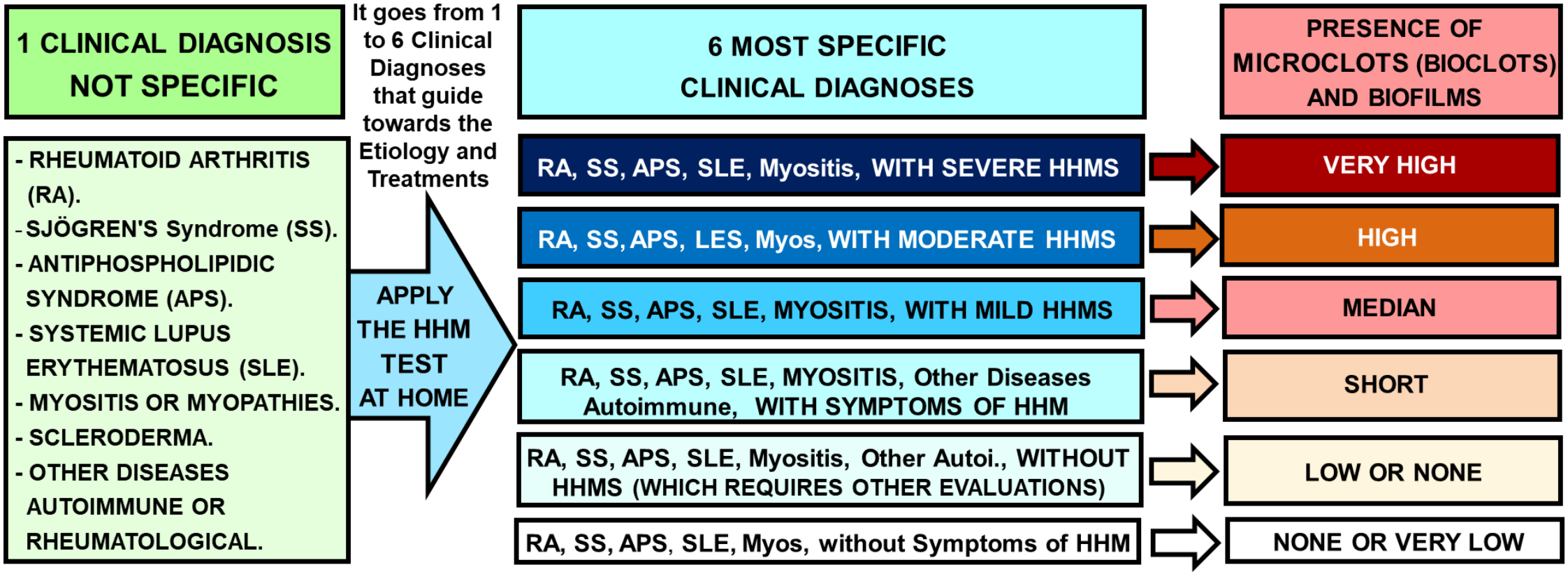
With the result of this Questionnaire, the patient would no longer have a diagnosis of only Chronic Fatigue, Arthritis, autoimmune disease or POTS, but would advance to a Diagnosis of Chronic Fatigue with or without the presence of Microclots,



Dr. GUSTAVO A. AGUIRRE CHANG

BACKGROUND AND TRAINING

In the case of Arthritis, Autoimmune Diseases and POTS, a more specific Diagnosis would be advanced, according to the presence and severity of the Symptoms associated with Hypoperfusion and Microclots. And with this more specific Diagnosis we can establish a Treatment Protocol to follow in each case.



2 FIRST PROTOCOLS FOR TREATING LONG COVID

The COVID Epidemic began in my country in the middle of March 2020, and since April 2020, we observed that some cases of COVID presented a Reactivation or Rebound of the symptoms, this after suspending the treatment with drugs against Viral Load.

On May 2, 2020, we published our first case report, on an effective treatment against the Viral Load in COVID.

INCLUSION OF IVERMECTIN IN THE FIRST LINE OF THERAPEUTIC ACTION FOR COVID-19.

A very significant decrease in Mortality Rate reported with its use.

Aguirre Chang, Gustavo A. UNMSM. ResearchGate. May 2, 2020.
English translation copy edited by Madeline Oh
doi: http://dx.doi.org/10.13140/RG.2.2.26424.57600/2

SUMMARY

Current evidence until April 30, 2020 regarding the use of Ivermectin in COVID-19 is reviewed.
A case series report is also made of 7 patients treated locally to date.

2 FIRST PROTOCOLS FOR TREATING LONG COVID

In said document, in the reported cases, an estimate is made of the tendency to develop a Persistent Infection.

So, in April 2020 we had already identified that Viral Persistence could occur, this would happen if a treatment against the Viral Load was not given in sufficient doses and days.

This is why, in the COVID Protocol that we published on May 2, we indicated higher doses and for many more days in Severe and Critical cases of COVID, with the aim of reducing and seeking to eradicate the Viral Load, to avoid Reactivations o Rebounds of the infection.

INCLUSION OF IVERMECTIN IN THE FIRST THERAPEUTIC ACTION FOR COVID-19.

A very significant decrease in Mortality Rate reported with its use.

Aguirre Chang, Gustavo A. UNMSM. ResearchGate. May 2, 2020.
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doi: http://dx.doi.org/10.13140/RG.2.2.26424.57600/2

SUMMARY

Current evidence until April 30, 2020 regarding the use of Ivermectin in COVID-19 is
A case series report is also made of 7 patients treated locally to date.

Table 3

NEW IVERMECTIN TREATMENT SCHEME FOR COVID-19 ver 30.06.20

PRESENTATION / SEVERITY	TABLETS of 6 mg.. If they are 3mg TB, divide Weight by 15 = TB number to give. (Dose for people with more than 56 Kg.**)	BOTTLE at 1%, in which 1 ml. equivalent to 10mg. and 0.1 ml. equivalent to 1 mg.
MILD	2 TB or 12 mg. after lunch and dinner (2 times a day) for 2 to 4 days. * If you weigh more than 85 kg, give 3 TB or 18 mg. 2 times a day for 2 to 4 days.	0.02 ml. x kilo of weight (or 0.1 ml e/ 5 kg.) after lunch and dinner for 2 to 4 days *
MODERATE	2 TB or 12 mg. after breakfast, lunch and dinner (3 times a day) for 5 to 9 days, depending on response to treatment and presence of side effects * If you weigh 85 to 115 kg, give 3 TB or 18 mg after breakfast, lunch and dinner. If you weigh more than 115 kg, give 4 TB or 24 mg. after breakfast/ lunch/ dinner.	0.02 ml. per kilo of weight after breakfast lunch and dinner (3 times a day) for 5 to 9 days, depending on response to treatment and presence of side effects.*
SEVERE	2 TB or 12 mg. after breakf., lunch, dinner and 11.30pm (4 times a day) for 7 to 12 d. Reduce the dose according to response to treatment and presence of side effects* If you weigh 85 to 115 kg, give 3 TB or 18 mg. after breakf., lunch, dinner, 11.30pm. If you weigh more than 115 kg, give 4 TB or 24 mg. after breakf/lunch/dinn/11.30pm.	0.02 ml. per kilo of weight after break, lunch, dinner and 11.30pm (4 times a day) for 7 to 12 d. Reduce the dose according to response to treatment and presence of side effects*
CRITICAL (hospitalized)	3 TB or 18 mg. every 6 hours (4 times a day) after meals for 9 to 15 days. Reduce the dose according to response to treatment and presence of side effects* If you weigh from 35 to 115 kg, give 4 TB or 24 mg. every 6 to 8 h. (3-4 times a day). If you weigh more than 115 kg, give 5 TB or 30 mg. every 6 to 8 h. (3-4 times a day).	0.03 ml. per kilo of weight (or 0.13 ml for every 5 kg.) every 6 h. (4 times a day) x 9 to 15 d. Reduce the dose according to response to treatment and presence of side effects*

* If symptoms persist, you should continue treatment until 2 to 3 days after no symptoms, including sore throat, weakness, semi-liquid stools. Side effects that are reason to reduce the doses are: blurred or yellow vision, dizziness, confusion and hives.
** For lower weights calculate the dose per kg: in Light give 0.4 mg/kg/d., in Moderate 0.6 mg/kg/d., in Severe 0.8 mg/kg/d. Critical 1.0 or + mg./kg/d.
*** For bottles without perforation, use a 3 or 5 ml syringe to measure the dose, and work with the equivalence of: 1 mL 0.6% Eco = 1 tab of 6mg.
Do not take it with fruit juice, lemonade, café or foods that contain orange or lemon (reduces effect). Consider that in Severe and Critical cases the Viral Load (Total Body) is High and Persistent, and the virus is present in various organs (lungs, intestines, heart, pericardium, kidney, etc).

Source: Aguirre-Chang Gustavo A. Inclusion of Ivermectin in the first therapeutic line of action for COVID-19. A very significant decrease in the Mortality Rate is reported with its use. Research Gate. May 2, 2020. doi: http://dx.doi.org/10.13140/RG.2.2.26424.57600/2

2 FIRST PROTOCOLS FOR TREATING LONG COVID

We established that the severity of COVID symptoms correlated with Viral Load, and logically a higher Viral Load warranted treatment with higher doses and for more days, as shown in the Table of the presentation.

Table. COVID-19 ACUTE: DOSE PER KILO OF WEIGHT OF IVERMECTINE ACCORDING TO SEVERITY, VIRAL LOAD AND RESPONSE TO TREATMENT

SEVERITY	VIRAL LOAD (BODILY TOTAL)	DIAGNOSTICS (related to Severity) add at the end: BY TO SARS COV-2	DOSE PER KILO OF WEIGHT PER DAY	N° of 6 mg Tablets TO BE GIVEN PER DAY (if they are 3mg TB, give double the N °)	TOTAL DAYS OF RECOM-MENDED TREATMENT***	ADDITIONAL DAYS TO TAKE AT THE END OF SYMPTOMS***
ASINTOMATIC (35-40% of the cases)	LOW	INFECTION (No Symptoms or Sub-Clinical) Asymptomatic Contacts are included here	0.2 mg	For 0.2 mg: Weight /30 = N° TB	1 to 4 days	Does not apply
MILD (35% of the cases)	MEDIUM	RHINITIS OR RHINOPHARINGITIS	0.4 mg *(give in 1 dose a day)*	For 0.4 mg: Weight /15 = N° TB	3 to 5 days	2 to 3 days
MODERATE (20% of the cases)	HIGH*	1) INITIAL ACUTE PULMONARY EDEMA (Mild ARDS or SARS, Exudative Stage w/ diffuse alveolar damage-DAD). 2) THROMBOPHILIA, Platelet Hyperactivity. 3) Investigate GASTROENTERITIS. 4) Investig. MYOCARDITIS/PERICARD.	0.6 to 1.0 mg *(give in 1 to 2 doses a day)*	For 0.6 mg: Weight /10 = N° TB For 0.8 mg: Weight /7.5 = N° TB	7 to 15 days	5 to 7 days
SEVERE (5% of the cases)	VERY HIGH*	1) ARDS or SARS MODERATE TO SEVERE. 2) COAGULOPATHY PULMONARY and Disseminated Micro-thrombosis. 3) GASTROENTERITIS. 4) MYOCARDITIS, Invest. PERICARDITIS, 5) Investig. ENCEPHALITIS. 6) SIRS.	0.8 to 1.5 mg** *(give divided into 1 to 3 doses a day)*	For 1.0 mg: Weight /6 = N° TB *Exam.: 72kg./6 = 12 TB*	9 to 22 days	6 to 10 days
CRÍTICAL (2-3% of the cases)	VERY HIGH*	1) SEVERE ARDS/SARS. 2) THROMBOEMBOLIC DISEASE. 3) GASTROENTERITIS. 4) MYOCARDITIS, Investig. HEART FAILURE. 5) Investigate ENCEPHALITIS. 6) Investigate ACUTE RENAL FAILURE. 7) SIRS. Investigate MAS, MODS.	1.2 to more mg** *(give divided into 2 to 3 doses a day)*	For 1.2 mg: Weight /5 = N° TB For 1.5 mg: Weight /4 = N° TB	16 to 30 days	9 to 15 days

FIRST PROTOCOLS FOR TREATING LONG COVID

Until that date, we called these cases as Infection Reactivation and Viral Persistence. And the cause that originated it was an insufficient treatment in doses and/or days against the Viral Load.

These cases of Reactivation, have been seen 2 years later with the use of Paxlovid, and are commonly called Rebound or Relapse of symptoms, and actually corresponds to a reactivation of the infection, which occurs after suspending effective treatment. against Viral Load.

We therefore have that, for the month of May 2020, for us, demonstrating that there was Viral Persistence was neither difficult nor expensive, since in those months and until June 2020, around 90% of the cases of Viral Persistence improved from quickly after between 2 to 6 days of treatment against Viral Load.

In the countries of North America and Europe, in those months, cases of patients presenting Persistent Symptoms of COVID had begun to be reported, and the terms Long haulers, Post-COVID Syndrome, Persistent COVID, Long COVID, among others, began to be used. And we were struck by the fact that Viral Persistence is not considered the main cause, since clinically, and due to the therapeutic response to drugs against Viral Load, we were sure of this.

It is then that we carried out the first study worldwide, of Case Reports of patients with Persistent Post-COVID Acute, Persistent COVID or Long COVID Symptoms, this Report was carried out based on patients that we treated between the months of May and June of the year 2020 .

2 FIRST PROTOCOLS FOR TREATING LONG COVID

In the image is this Report of 33 Cases, in which the result was that in 94% of the cases a total clinical resolution of the symptoms was observed. The medication used was Ivermectin.

POST-ACUTE OR PROLONGED COVID-19: TREATMENT WITH IVERMECTIN FOR PATIENTS WITH PERSISTENT, OR POST-ACUTE SYMPTOMS

Aguirre-Chang, Gustavo; Castillo Saavedra, Eduardo; Yui Cerna, Manuel; Trujillo Figueredo, Aurora; Córdova Masías, José. Reseach Gate. July 11, 2020.
English translation copy edited by Madeline Oh

SUMMARY

INTRODUCTION: It is estimated that between 10 to 45% of people who become ill with COVID-19 will present with symptoms after the acute stage of the disease. These symptoms will persist for weeks, developing what is called Persistent or Post-Acute Symptoms of COVID- 19. There is no consensus, nor has there been a publication on specific and effective treatment for these cases. Knowledge is quite lacking as to its etiopathogenesis.

MATERIAL AND METHODS: 33 patients with Persistent or Post-Acute Symptoms of COVID-19, who were between weeks 4 and 12 from the onset of symptoms were enrolled in the present study. Patients whose main symptoms were musculoskeletal such as fatigue due to muscle weakness, diminished muscle strength and myalgia (muscle pain) were excluded. The following protocol was followed: in cases with mild symptoms, Ivermectin was administered at a dose of 0.2 mg per kilogram of body weight per day for 2 days. If patients still had symptoms after the 2 doses, 2 additional days of Ivermectin treatment were given at the same dose. For cases with moderate symptoms, a dose of 0.4 mg per kilogram of body weight was prescribed for 2 days, followed by 0.2 mg per

2

FIRST PROTOCOLS FOR TREATING LONG COVID

Patients whose main symptoms were of the muscular system, such as fatigue from muscle weakness, decreased muscle strength, and myalgia or muscle pain, were excluded from this study. In these cases we observed that the treatment with only 1 drug against the viral load was insufficient, we assumed that the Viral Load in these cases was high and disseminated, affecting the blood vessels that carry blood and oxygen to the muscles. For these cases we were preparing a Protocol that included 3 drugs against Viral Load that were given at the same time, and also drugs to improve blood flow and prevent the formation of microclots.

Of the 33 patients with Persistent Symptoms, 19 had Anosmia or Hyposmia as their main symptom, of these 19 cases, 100% achieved full recovery.

5 patients had night sweats and low-grade fever as the main persistent symptom.

In 4 cases the main symptom was pain in the middle of the thorax that increased with physical effort.

In 3 cases the main symptom was semi-liquid stools and abdominal discomfort.

In all these cases 100% of the total recovery was also achieved.

And the cases in which total recovery was not achieved were 2 cases that presented dyspnea and also pain in the middle of the thorax.

FIRST PROTOCOLS FOR TREATING LONG COVID

We had that until June 2020, around 90% of the cases of Viral Persistence recovered in a short time. But since April 2020 we had already observed that the SARS CoV-2 virus developed resistance to the drugs to which it was exposed. First he went to Hydroxychloroquine, of which as of April 2020 we observed several cases that did not respond to this medication.

And since May 2020 little by little we have been observing an increase in cases that did not respond to IVM. But this is still useful in both Acute and Chronic COVID. In Long COVID it is useful especially in cases in which IVM has not been used previously, which reduces the probability that the patient has a strain of the virus that has developed drug resistance.

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POST-ACUTE OR PROLONGED COVID-19: TREATMENT WITH IVERMECTIN FOR PATIENTS WITH PERSISTENT, OR POST-ACUTE SYMPTOMS

Aguirre-Chang, Gustavo; Castillo Saavedra, Eduardo; Yui Cerna, Manuel; Trujillo Figueredo, Aurora; Córdova Masías, José. Reseach Gate. July 11, 2020.

NEW PROTOCOLS FOR TREATING LONG COVID

The initial Protocol used only Ivermectin, in May 2020 90% of the cases of Viral Persistence recovered.

This percentage of recovery was decreasing month by month, by the end of 2020 the percentage of cases of Viral Persistence that recovered fell to 75%.

And for the month of March 2021, the cases that recovered were reduced to 60%.

This is why, since March 2021, we have already mentioned the existence of a high number of Drug-Resistant Long COVID cases, for which the Protocols that we indicated already contained 3 drugs against the Viral Load.

3 NEW PROTOCOLS FOR TREATING LONG COVID

3-3-3 Protocols

3-3-3 TREATMENT REGIME/PROTOCOL FOR PATIENTS WITH PACS, LONG COVID OR CHRONIC COVID WITH VIRAL LOAD DRUG-RESISTANT AND UNDERCOVER

1st Line of Action/Objective: REDUCE THE VIRAL LOAD:

1.1 IVM (or Pyronaridine+Artesunate, Artemisinin, Monolaurin, Pelargonium, MOX).

1.2 NITAZOXANIDE (or EGCG, High dose Ozone or 10 Pass or EBOO, Lithospermum e. or Gromwell, IVIG, last mAbs, Chinese Skullcap or Baicalin, Niclosamide, Hydrogen Peroxide, Methylene Blue, Olive Leaf Extract).

1.3 ZINC (or Emtricitabine/Tenofovir, Nirmatrelvir/Ritonavir, Black seed oil: Nigella sativa, Vitamin C, Spironolactone, Metformin, Plitidepsin, Rutin, Theracurmin).

2nd Line de Action/Objective: REDUCE PLATELET HYPERACTIVITY AND BREAK DOWN PERSISTENT CLOTS AND BIOFILMS:

2.1. ANTIPLATELET: ASA, or LASA: Lysine Acetylsalicylate, or LASAG: + Glicine (or Clopidogrel, Ginger, Dipyridamole, Garlic, Taxifolin, Policosanol, Naringin).

2.2. 2 FIBRYNOLYTIC: SERRAPEPTASE + NATTOKINASE or Lumbrokinase or Lysine (or Bromelain, Seaprose S, Superpeptase, Thrombolytics IV, Pentoxifylline)

2.3. SUPPLEMENT WITH EFFECT ON THE CIRCULATION: Liposomal Glutathione, E-EPA or EPA, Omega 3, Diosmin + Hesperidin (or Vitamin D, Nebivolol, Statins or Red Yeast Rice, Colchicine, Melatonin, R-ALA, Piracetam, Sidenafil).
OR ANTICOAGULANT: Apixaban, Rivaroxaban, LMWH, Dabigatrane.

3ra Line de Action/Objective: TREAT NUTRIENT DEPLETION, OXIDATIVE STRESS AND IMMUNE DYSFUNCTIONS:

3.1. B COMPLEX VITAMINS: B3 (Niacine) or derivative, Vit. B12 (sublingual or in intramuscular ampoule), B1 or derivative, B6, and B9 (Folic Acid or Folinic Acid).

3.2. FAMOTIDINE (or Baking Soda or Sodium and/or Potassium Bicarbonate).

3.3. 2 or 3 ANTIHISTAMINES: indicated:

NEW PROTOCOLS FOR TREATING LONG COVID

But let us clarify that there is currently a wide variety of cases, depending on the existence or not of Drug-Resistance and the amount of drugs to which the strain of the virus that infects the patient is resistant.

On the one hand, there are still cases that recover quickly and in a few days, they are cases that have a strain of the virus that is sensitive to drugs against Viral Load.

And on the other hand we have the Drug-Resistant and Multi-Drug Resistant or MDR cases, and over time Extremely Resistant cases will appear, which are called by the initials XDR.