

ENMIENDA I

Registro de insuficiencia cardíaca descompensada

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Resumen

La insuficiencia cardíaca descompensada es una patología que ha incrementado su prevalencia como resultado del aumento de la insuficiencia cardíaca (IC) en el mundo. Un 2% aproximadamente de la población mundial padece esta patología, elevándose a más del 15% en los mayores de 65 años. Las descompensaciones obedecen a diferentes causas según el tipo de tratamiento aplicado, seguimiento y control médico y las características propias del cuadro clínico de ingreso. La ausencia de registros amplios y representativos en Argentina nos ha planteado como desafío la realización de un registro que nos permita incluir a su vez diferentes asociaciones (IC y anemia, IC y embarazo e IC con fracción de eyección preservada y reducida).

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Palabras clave: Registro - Insuficiencia cardíaca - Descompensada - Fracción de eyección - Anemia - Embarazo

Summary

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Decompensated heart failure registry

Decompensated heart failure is a disease which has increased its prevalence as a result of increased heart failure (HF) in the world. Approximately 2% of the world population suffers from this disease rising to over 15% in those over 65 years. Decompensation occurs due to different causes depending on the type of treatment, monitoring and medical monitoring and clinical characteristics of admission to hospital. The absence of comprehensive and representative registry in Argentina generated challenges us to the realization of a registry enabling us to include in turn different associations (HF and anemia, HF and pregnancy, and HF with preserved and reduced ejection fraction).

Keywords: Registry - Heart failure - Decompensated - Ejection fraction - Anemia - Pregnancy

Resumo

ENMIENDA I

Registro de insuficiência cardíaca descompensada

A insuficiência cardíaca descompensada (ICD) é uma doença que tem aumentado a sua prevalência como resultado do crescimento da insuficiência cardíaca (IC) no mundo. Cerca de 2% da população mundial sofre desta doença

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chegando a mais de 15% em pessoas com mais de 65 anos. A descompensação ocorre devido a causas diferentes, dependendo do tipo de tratamento, monitoramento e vigilância médica e características clínicas da entrada do hospital. A ausência de registros abrangentes e representativos em Argentina nos levou para o desafio da realização de um registro que nos permita incluir, por sua vez diferentes associações (IC e anemia, IC e gravidez e IC com fração de ejeção preservada e reduzida).

Palavras-chave: Registro - Insuficiência cardíaca - Descompensada - Fração de ejeção - Anemia - Gravidez

Introducción

La insuficiencia cardíaca descompensada (ICD) es una patología que ha incrementado su prevalencia como resultado del aumento de la insuficiencia cardíaca (IC) en el mundo. Un 2% aproximadamente de la población mundial padece esta patología elevándose a más del 15% en los mayores de 65 años. Las descompensaciones obedecen a diferentes causas según el tipo de tratamiento aplicado, seguimiento y control médico y las características propias del cuadro clínico de ingreso. La ausencia de registros amplios y representativos en Argentina nos ha planteado como desafío la realización de uno que nos permita incluir a su vez diferentes asociaciones (IC y anemia, IC y embarazo e IC con fracción de eyección -FE- preservada y reducida).

Hipótesis

La realización de un registro nacional de ICD, mediante la colaboración entre diferentes centros asistenciales, permitirá obtener un perfil epidemiológico más amplio y adecuado de la patología en nuestro país.

Objetivos (Ver anexos)

- 1- Registrar las características de los pacientes portadores de insuficiencia cardíaca que han padecido un episodio de descompensación.
- 2- Realizar un seguimiento de 90 días posteriores al alta. Seguimiento *opcional* a 30, 60 y 365 días.
- 3- Realizar el sub-registro de los pacientes portadores de IC con FE reducida.
- 4- Realizar el sub-registro *opcional* de los pacientes portadores de IC con FE preservada.
- 5- Realizar el sub-registro *opcional* de los pacientes portadores de IC y anemia.
- 6- Realizar el sub-registro *opcional* de los pacientes portadores de IC y embarazo.

Material y métodos

El registro se desarrollará y coordinará con la conformación de un Comité Científico Coordinador (CCC) integrado por profesionales del Comité de Insuficiencia Cardíaca e Hipertensión Pulmonar de la Federación Argentina de Cardiología e investigadores del mismo Comité.

La Coordinación de los mismos estará a cargo del Dr. Guillermo Cursack. Se realizará un registro multicéntrico, observacional, prospectivo ingresando los casos incidentes definidos por aquellos diagnosticados entre el 1° de Diciembre de 2014 y el 1° de Marzo de 2016. El síndrome de ICD puede presentar diferentes formas clínicas, que no siempre son posibles de diferenciar en el momento del ingreso del paciente, pero pueden ser de utilidad en el manejo intra-hospitalario y en la evolución después del alta:

- a) Paciente que ingresa al departamento de emergencia por un empeoramiento de su cuadro crónico de IC, constituyendo el 70% de todas las admisiones por ICAD; ya sea, con función sistólica del ventrículo izquierdo (VI) disminuida o preservada.
- b) Paciente que ingresa con cuadro de IC de reciente comienzo. Esta situación puede ocurrir después de un infarto agudo de miocardio (IAM), una crisis de elevación rápida de la presión arterial (HTA: hipertensión arterial), y en general se presentan con un VI alterado (constituye el 25% de todos los ingresos).
- c) Pacientes con severa y avanzada IC, en general con escasa o poca respuesta al tratamiento, habitualmente, con muy baja fracción de eyección del VI (FEVI), y que suelen ser gatillada por enfermedades asociadas, transitorias o permanentes, como algún episodio de infección broncopulmonar, descompensación de su diabetes, etc., correspondiendo al 5% de las admisiones.

Criterios de inclusión

Pacientes hospitalizados por ICD que cumplan con al menos dos de las categorías de diagnóstico:

1. Signos y síntomas compatibles con un cuadro clínico de ICD.
2. Evidencias de cardiopatía estructural.
3. Respuesta al tratamiento.
4. Necesidad de tratamiento endovenoso con diuréticos, inotrópicos y/o vasodilatadores.

Criterios de exclusión

1. Síndrome coronario agudo en los 3 meses previos (angina inestable, IAM, cirugía de revascularización miocárdica -CRM- o angioplastia transluminal coronaria -ATC-).
2. Enfermedad grave (tumoral, hepática o renal) con pronóstico ominoso a corto plazo.

3. Imposibilidad de realizar un seguimiento adecuado. Se utilizará un soporte informático previsto por el Centro de Teleinformática Médica de la Federación Argentina de Cardiología (CETIFAC) dependiente de la Facultad de Ingeniería/Bioingeniería/CONICET de la Universidad Nacional de Entre Ríos (UNER), que constará de un portal *web* con usuario y contraseña para cada investigador que integre el registro. Sólo tendrán acceso a los datos ingresados el investigador implicado y el/los coordinadores que sean designados al efecto.

Estadística

Las variables categóricas se expresarán como porcentajes y se compararán con el *Test* Chi-cuadrado de Pearson. Las variables continuas se presentarán como media y desvío estándar, y se compararán con el *Test* de Student o el *Test* U de Mann-Whitney. Las variables de los factores asociados a la mortalidad y las hospitalizaciones se evaluarán en un análisis univariado y multivariado mediante el modelo proporcional de Cox. Se construirán curvas de supervivencia de Kaplan-Meier. Un valor de $p < 0,05$ en todos los análisis se considerará estadísticamente significativo. Todos los análisis estadísticos se realizarán con el programa SPSS 18.0 (SPSS Inc., Chicago, Il).

Comité Científico Coordinador (CCC)

Su rol será conducir la realización del registro en todos sus aspectos, contará con dos grupos de apoyo: el grupo de control de datos y el grupo de publicaciones. Ambos dependerán directamente del CCC.

Integrantes:

Dr. Diego Federico Echazarreta.
Dr. Eduardo Perna.
Dr. Roberto Colque.
Dra. Lilia Lobo Márquez.
Dra. Daniela García Brasca.
Dr. Pablo Nasca.

Grupo de control de datos

Su rol es garantizar la calidad de los datos ingresados en el registro. Realizará el monitoreo de los datos desde los distintos centros participante y se ocupará de analizar si se cumplen los criterios de inclusión/exclusión y el envío en tiempo y forma de los datos. También realizará visitas de auditoría a los centros participantes con el objetivo de entrenamiento y control de la carga o ingreso de los datos. Estará en contacto directo con el centro único de datos para evaluar los datos ingresados por los diferentes centros. Finalmente, brindará opinión experta sobre el diseño del registro en cuanto a tópicos nuevos a explorar.

Integrantes:

Dr. Pablo Címbaro Canella.
Dra. María Lorena Coronel.

Dr. Pablo Alvarenga.
Dr. Guillermo Cursack.
Dr. Cristian Botta.

Política de publicaciones

Los médicos participantes en el registro que desean llevar adelante un proyecto de investigación utilizando las variables incluidas, enviarán el protocolo al CCC. Se analizará cada proyecto considerando el aspecto científico del mismo. Se consultará al asesor estadístico sobre la factibilidad del proyecto. El CCC solicitará al centro de datos que libere al investigador principal del proyecto y los datos requeridos para la realización del proyecto.

Una vez finalizado el proyecto, el investigador principal lo enviará al CCC para su revisión/aprobación. Para ser investigador principal y poder plantear una hipótesis de trabajo, su centro debe cubrir un mínimo de pacientes incluidos. El investigador debe incorporar al proyecto de investigación a los médicos participantes que más pacientes incluyeron. Se considerará autor al investigador que haya realizado el proyecto de investigación y los otros se asignarán de acuerdo al número de pacientes incorporados y su interés en el proyecto.

Centro único de datos (Centro de Teleinformática Médica de FAC: CETIFAC)

Es el área que manejará la base de datos, realizará el mantenimiento del registro y controlará la carga de datos desde los diferentes centros. No brindará información a pedidos personales de los médicos participantes, si no en el marco de un proyecto de investigación que tenga el aval del grupo de publicaciones y del CCC. El centro único de datos reportará sobre el avance del registro al CCC.

Monitor de datos

Será el responsable de controlar la calidad de los datos ingresados, realizando un seguimiento de cada centro integrante del registro y de los investigadores participantes.

Política de propiedad y de publicación

El Registro de ICD es un proyecto multicéntrico. Los médicos que participan en el registro son propietarios de los datos de su propio sitio o centro. Los datos consolidados, señalados anónimos, son propiedad del CCC.

Captura de datos y seguridad

Se utilizará un sistema avanzado de captura electrónico de datos a través de *internet*. El acceso a la base de datos estará restringido a los usuarios autorizados, quienes se identificaran así mismos con una clave (código) de

identificación de usuario única y una contraseña (*User ID and Password*). Se utilizará una conexión *http//* para la transferencia segura de los datos. Los mismos serán codificados durante la transferencia en *internet* y serán almacenados en una base de datos protegida con acceso autorizado.

Confidencialidad de los datos del paciente

La privacidad de los pacientes en el registro será garantizada dado que los nombres o iniciales de los pacientes no se almacenarán en la base de datos. Los pacientes serán identificados por una clave de paciente única. (Al introducir los datos filiatorios del paciente el sistema los manda a un cofre cerrado y genera la clave única del paciente). Cada centro tendrá acceso sólo a los datos de aquellos pacientes bajo su cuidado directo.

Control de calidad de los datos

El uso del sistema avanzado de captura electrónica de datos permitirá chequear la calidad de los datos al introducirlos y verificar los datos faltantes e información incompleta. Todo el manejo de los datos y el análisis ocurrirá en un ambiente computarizado validado. Los datos del registro no serán verificados o confrontados con los documentos de origen.

Consejo de Revisión Institucional (CRI) / Comité de Ética Independiente (CEI)

Dependiendo de las regulaciones locales y las políticas de la institución del médico participante, el médico puede tener que someter el registro del protocolo, una forma de la carta de autorización del paciente y otra de información relevante al CRI/CEI. En tal caso, la aprobación del CRI/CEI debe ser obtenida antes de introducir los datos a la base de datos. La información/aprobación del CRI debe estar documentada en una carta dirigida al médico participante, identificando claramente el nombre del registro, los documentos revisados y la fecha de aprobación.

Autorización del paciente

De cada paciente se obtendrá la autorización apropiada (consentimiento adjunto), pues así lo requieren las políticas institucionales o las regulaciones de privacidad nacional o estatal que se relacionan a la información médica. Lo anterior debe hacerse antes de introducir datos al registro de ICD.

Retiro del paciente

La participación del paciente es voluntaria. En cualquier momento, el paciente puede retirar su consentimiento para participar, sin que ello afecte su atención médica o tratamiento.

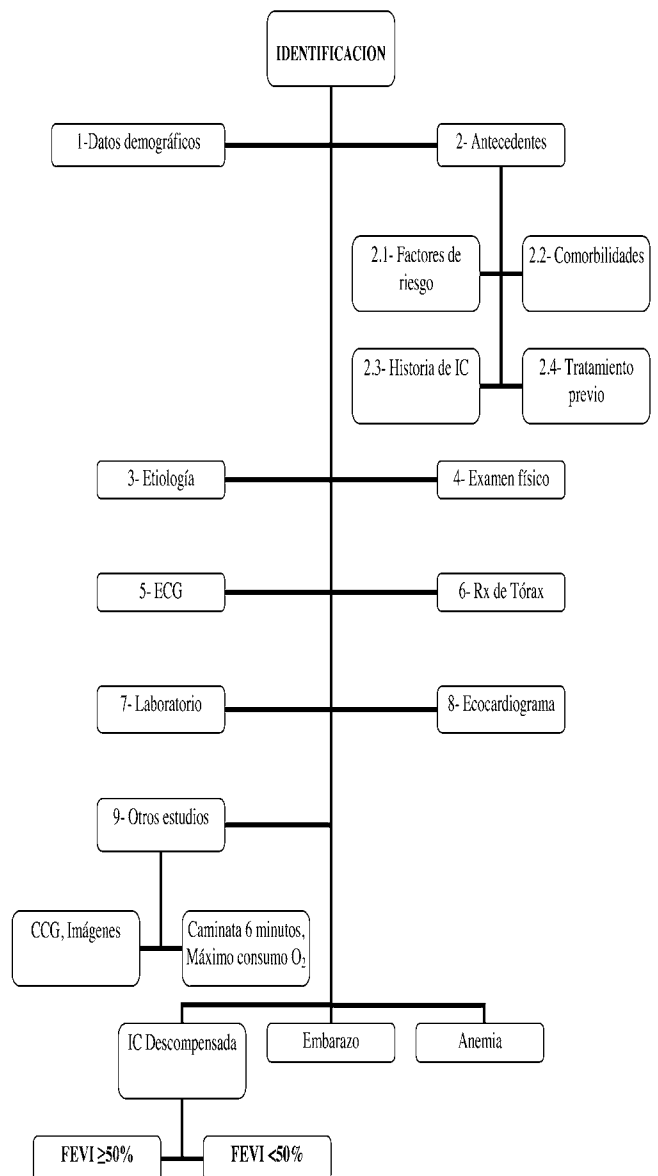
Retiro de un investigador o centro

El reglamento contempla el retiro voluntario o no de un investigador o de un centro. Los pacientes que fueron incluidos por ellos al registro permanecerán en el mismo.

Anexos

- A.- Algoritmo del Registro de ICD.
- B.- Identificación del Registro de ICD.
- C.- Registro de ICD.
- D.- Registro de ICD.
- E.- Registro de IC y Embarazo.
- F.- Registro de IC y Anemia

A.- ALGORITMO del REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA



B.- IDENTIFICACION del REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA

Centro	Paciente	Iniciales	Fecha de inclusión	REGISTRO							
				IC aguda con FE preservada		IC aguda con FE reducida		IC en embarazadas		IC y anemia	
				Incluido	Completo	Incluido	Completo	Incluido	Completo	Incluido	Completo
			__/__/__	Sí/No	Sí/No	Sí/No	Sí/No	Sí/No	Sí/No	Sí/No	Sí/No
			__/__/__								
			__/__/__								
			__/__/__								
			__/__/__								
			__/__/__								

IC: insuficiencia cardíaca. FE: fracción de eyección.

C.- REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA

1-Datos demográficos

N° centro: ____ N° paciente: ____ Nombre (sólo iniciales): ____ Fecha de nacimiento: __/__/____
 Edad:(calcular) Sexo: M / F. Provincia:(lista de provincias)
 Obra social: (PAMI /Provincial / Otra OS / Prepaga/ Sin cobertura)

M: masculino. F: femenino. PAMI: programa de atención médica integral.

2-Antecedentes

2.1. Factores de riesgo

HTA TBQ actual Ex TBQ DLP Obesidad DBT Alcoholismo

2.2. Comorbilidades

ACV Neoplasia EPOC IRC Diálisis Demencia TEP Anemia Hepatopatía
 Artrosis SIDA Hipotiroidismo Hipertiroidismo Arteriopatía periférica Chagas (+)
 Fibrilación auricular:..... Infarto Previo Angina crónica Cirugía Valvular TVS/FV/MS
 Apnea sueño

2.3. Historia de Insuficiencia Cardíaca

Presencia de síntomas de IC: (<30 días/ >30 días) Tiempo de evolución: ____ meses
 Diagnóstico previo Internaciones previas por IC: Número de internaciones último año: __
 Valoración previa de función ventricular:
 Normal o FEVI ≥ 50% / deterioro leve o FEVI: 49-40% / deterioro moderado o FEVI: 39-30% /
 Deterioro severo o FEVI: < 30% Disnea de esfuerzo Fatiga Clase Funcional habitual: (I / II / III / IV)

2.4. Tratamiento previo

Angioplastia/Stent CRM Marcapasos definitivo Resincronizador: CDI
 Beta bloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
 Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
 Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida dosis _____ mg
 Hidroclorotiazida Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina
 Estatinas Otro hipolipemiente

HTA: hipertensión arterial. TBQ: tabaquismo. DLP: dislipidemias. DBT: diabetes.
 ACV: accidente cerebro vascular. EPOC: enfermedad pulmonar obstructiva crónica. IRC: insuficiencia renal crónica.
 TEP: tromboembolismo pulmonar. SIDA: síndrome de inmunodeficiencia adquirida. TVS: taquicardia ventricular sostenida. TV: taquicardia ventricular. MS: muerte súbita. IC: insuficiencia cardíaca. FEVI: fracción de eyección del ventrículo izquierdo. CRM: cardio-resonancia magnética. CDI: cardiodesfibrilador implantable. IECA: inhibidores de la enzima convertidora de angiotensina. ATII: angiotensina II. AAS: ácido acetil salicílico.

3-Etiología (sólo la causa principal)

Isquémico/necrótica: Hipertensiva: Chagásica: MCP hipertrófica: Idiopática: Alcohólica:
 Miocarditis: MCP restrictiva: Valvulopatía severa: Aclarar: No establecida:
 Otra Aclarar:

MCP: miocardiopatía.

4-Examen físico

TA: ___/___ mm Hg FC: ___ l/min FR: ___/min Talla: ___ cm Peso: ___ Kg IMC: ___ (calcular)
Superficie corporal ___ m² (calcular)
Estado clínico: Compensado Descompensado
Score de congestión basal: Disnea ___ Ortopnea ___ Edema ___ Ingurgitación yugular ___ Rales ___
Necesidad de aumento de diuréticos ___ Aumento de peso > 1 Kg ___.

TA: tensión arterial. FC: frecuencia cardíaca. FR: frecuencia respiratoria. IMC: índice masa corporal.

5-ECG

ECG Normal Ritmo _____ PR ___ mseg BCRD: BCRI: Ondas Q:
QRS: ___ mseg QTm: ___ mseg

ECG: electrocardiograma. BCRD: bloqueo completo de rama derecha. BCRI: bloqueo completo de rama izquierda.

6-Radiografía de tórax

Radiografía de tórax Normal Cardiomegalia >0,55 Congestión pulmonar Edema alveolar

7-Laboratorio

Hematocrito ___ % Hemoglobina ___ g/dl Glóbulos blancos ___/mm³ Plaquetas ___/mm³
Glucemia ___ mg/dl Urea ___ g/l Creatinina ___ mg/dl MDRD (calcular) ___ Sodio ___ mEq/l
Potasio ___ mEq/l GOT ___ UI/l GPT ___ UI/l GGT ___ UI/l Bilirrubina total ___ mg/dl Bilirrubina directa ___ mg/dl
Proteínas ___ g/l Albúmina ___ g/l Colesterol total ___ mg/dl Ácido úrico ___ mg/dl BNP ___ pg/ml
NT-proBNP ___ pg/ml Tnl ___ ng/ml TnT ___ ng/ml TnTus Tnl ___ pg/ml TP ___ seg
pH ___ CO₂ ___ mm Hg pO₂ ___ mm Hg Sat O₂ ___ % Bicarbonato ___ EB ___

MDRD (*Modification of Diet in Renal Disease*): índice o tasa de filtrado glomerular en función a la edad. GOT: transaminasa glutámico oxalacética. GPT: transaminasa glutámico pirúvica. GGT: glutamil transpeptidasa. BNP: péptido natriurético del tipo B. NT-proBNP: prohormona N-terminal del péptido natriurético cerebral. Tnl: troponina I. TnTus: troponina T ultrasensible. CO₂: dióxido de carbono. pO₂: presión de oxígeno. Sat O₂: saturación de oxígeno. EB: exceso de base.

8-Ecocardiograma

Tipo _____ AI ___ mm DDVI ___ mm DSVI ___ FEVI ___ HVI PSP ___ mm Hg E/E' ___
Evaluación cualitativa de función del VI: _____ Patrón de llenado del VI _____
Valvulopatía severa En caso afirmativo, ¿cuál?: EAO: IAO: EM: IM: IT

DDVI: diámetro diastólico del ventrículo izquierdo. DSVI: diámetro sistólico del ventrículo izquierdo HVI: hipertrofia ventricular izquierda. VI: ventrículo izquierdo. EAO: estenosis aórtica. IAO: insuficiencia aórtica. EM: estenosis mitral. IM: insuficiencia mitral. IT: insuficiencia tricuspídea. PSP: presión sistólica de la arteria pulmonar.

9-Otros estudios

CCG En caso afirmativo complete ACN 1 vaso 2 vasos 3 vasos Tronco
Perfusión miocárdica En caso afirmativo: Normal Isquemia Necrosis Viabilidad positiva
Radiocardiograma En caso afirmativo: FE Basal ___ % FE esfuerzo ___ %
Caminata de 6 minutos Distancia recorrida ___ metros MVO₂: ___
Holter EEF Otro estudio (15 caracteres) _____

CCG: cinecoronariografía. ACN: angina con coronarias normales. MVO₂: consumo miocárdico de oxígeno. EEF: estudio electrofisiológico. FE: fracción de eyección.

D.- REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA

Admisión

Fecha de internación __/__/____ Lugar de internación inicial _____
Congestión sistémica Congestión pulmonar Edema de pulmón Síndrome de bajo gasto
Shock cardiogénico Perfil húmedo Perfil seco

Descompensación

Inicio < 12 horas Se identificó un factor descompensante: No Si Contestó Si?, complete lo siguiente:
¿Cuál?: Transgresión alimentaria Modificación del tratamiento Arritmia supraventricular Anemia
Arritmia ventricular Crisis hipertensiva Isquemia/infarto Infección TEP Otra: (20 caracteres)

TEP: tromboembolismo pulmonar

Procedimientos intrahospitalarios

Cardioversión: Desfibrilación Vía central O₂ con máscara CPAP BiPAP ARM
CRM ATC Cirugía valvular Balón de contrapulsación Ultrafiltración Diálisis
Trasplante CDI Marcapasos transitorio Marcapasos definitivo Resincronización
Estimación presiones con Doppler/tisular E/E': __, __ CCG-IH Swan-Ganz: PAD basal __ mm Hg
PAD final __ mm Hg PCP basal __ mm Hg PCP final __ mm Hg Ic basal __ l/m/m² Ic final __ l/m/m²
RVS basal ____ días RVS final ____ días

CPAP: presión positiva continua en la vía aérea. BiPAP: presión positiva de dos niveles en la vía aérea. ARM: asistencia respiratoria mecánica. CRM: cardio-resonancia magnética. ATC: angioplastia transluminal coronaria. CDI: cardiodesfibrilador implantado. CCG-IH: cinecoronografía intrahospitalaria. PAD: presión de aurícula derecha. PCP: presión capilar pulmonar. Ic: índice cardíaco. RVS: resistencia vascular periférica.

Tratamiento intrahospitalario

Incremento de diuresis VO: Incremento de diuresis IV: Diuréticos bolo Diuréticos infusión
Dopamina < 5 gammas Inotrópicos/presores IV: Dobutamina Dopamina > 5 gammas
Levosimendan Otro Vasodilatadores IV NPS NTG

VO: vía oral. IV: intravenoso. NPS: nitroprusiato de sodio. NTG: nitroglicerina.

Evolución intrahospitalaria

Complicaciones: En caso afirmativo seleccione las que se aplican:
Embolia de pulmón: Infección: ACV: TV/FV: Fallo renal Arritmia supraventricular:
Shock cardiogénico/hipotensión:

ACV: accidente cerebrovascular. TV/FV: taquicardia ventricular / fibrilación ventricular

IC refractaria: Día de internación en que se diagnosticó IC refractaria __

Muerte: Fecha __/__/____ Causa: _____

Alta hospitalaria

Fecha alta o muerte __/__/____ Días en UCIC/UTI __ Días totales (calcular desde ingreso)
Estado del paciente: Peso ____, Kg Asintomático Mejor, pero aún sintomático
Score de congestión al alta: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales _
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
Creatinina pre-alta (nuevo valor de creatinina obtenido luego de 48 hs de la admisión) ____ mg/dl
Betabloqueantes droga _____ dosis ____ mg/d IECA droga _____ dosis ____ mg/d
Inhibidores ATII droga _____ dosis ____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis ____ mg/d Furosemida Dosis ____ mg
Hidroclorotiazida Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina
Estatinas Otro hipolipemiante

Recomendaciones

Dejar de fumar Dieta hiposódica (2 gr sal) Restricción hídrica (< 1,5 litro por día)
Ejercicio regular Rehabilitación Visita de control dentro de 30 días Laboratorio control
Control periódico de peso Régimen elástico de diuréticos

Control a los 30 días

Fecha __/__/____
Internación Fecha __/__/____ Causa _____ Muerte: Fecha __/__/____ Causa: _____
Peso ____, kg Score de congestión 30 días: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales __
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
Creatinina (luego del alta) __, __ mg/dl Hematocrito __, % Hemoglobina __, __ g/dl
Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg
Hidroclorotiazida Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina
Estatinas Otro hipolipemiante

Control a los 90 días

Fecha __/__/____
Internación Fecha __/__/____ Causa _____ Muerte: Fecha __/__/____ Causa: _____
Peso ____, kg Score de congestión 30 días: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales __
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
Creatinina (luego de 30 días) __, __ mg/dl Hematocrito __, % Hemoglobina __, __ g/dl
Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg
Hidroclorotiazida Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina
Estatinas Otro hipolipemiante

Control a 1 año

Fecha __/__/____
Internación Fecha __/__/____ Causa _____ Muerte: Fecha __/__/____ Causa: _____
Peso ____, kg Score de congestión 30 días: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales __
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
Creatinina (luego de 30 días) __, __ mg/dl Hematocrito __, % Hemoglobina __, __ g/dl
Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg
Hidroclorotiazida Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina
Estatinas Otro hipolipemiante

UCIC/UTI: unidad de cuidados intensivos coronarios/unidad de terapia intensiva.
IECA: inhibidores de la enzima convertidora de angiotensina. ATII: angiotensina II. AAS: ácido acetil salicílico.

**REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA
FEVI ≥50% y <50%**

Ecocardiograma intrahospitalario

Fecha __/__/____ Días de internación __
Score de congestión día del Ecocardiograma: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales __
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
AI __ mm DDVI __ mm DSVI __ FEVI __ % HVI AD __ mm
Evaluación cualitativa de función del VI: _____ Patrón de llenado VI _____
Valvulopatía severa En caso afirmativo, ¿Cuál?: EAO: IAO: EM: IM: IT
PSAP __ mm Hg PMAP __ mm Hg PDAP __ mm Hg E/E' __ FEVD __ % TAPSE __ mm
Septum __ cm PP __ cm Índice volumen AI __ mm³ Onda E __ m/s Onda A __ m/s Relación E/A __
Tiempo de desaceleración de la onda E __ mseg Tiempo de relajación isovolumétrica __ mseg
Flujo de venas pulmonares: Velocidad pico sistólico __ m/s Velocidad pico diastólico __ m/s
Onda reversa __ m/s Ar-A __ m/s Relación VS/VD _____
Dilatación de AD Dilatación de VD Dilatación de arteria pulmonar Insuficiencia mitral:
Doppler tisular del anillo mitral: Pico E __ cm/seg Pico S __ cm/seg Pico A __ cm/seg

FEVI: fracción de eyección del ventrículo izquierdo. AD: aurícula derecha. HVI: hipertrofia ventricular izquierda. EAO: estenosis aórtica IAO: insuficiencia aórtica. EM: estenosis mitral. IM: insuficiencia mitral. IT: insuficiencia tricuspídea. DDVI: diámetro diastólico del ventrículo izquierdo. DSVI: diámetro sistólico del ventrículo izquierdo. PSAP: presión sistólica arterial pulmonar. PMAP: presión media de arteria pulmonar. PDAP: presión diastólica arterial pulmonar. FEVD: fracción de eyección del ventrículo derecho. TAPSE: desplazamiento sistólico del plano del anillo tricuspídeo. VS/VD: volumen sistólico/volumen diastólico. AD: aurícula derecha. VD: ventrículo derecho.

E.- REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA y EMBARAZO

Demografía

Fecha de inclusión __/__/____ Tipo de Registro: _____
Primer contacto: _____ Médico/Centro que registra el paciente: _____
Centro Obstétrico: (50 caracteres) _____
Investigador Obstétrico: (50 caracteres) _____

Diagnóstico de IC

Fecha diagnóstico de IC __/__/____ Fecha última menstruación __/__/____
Relación con el parto _____ Semana gestación __ Mes postparto _ Embarazo múltiple
Evolución de la IC _____
Score de congestión al diagnóstico: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales _
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _

Antecedentes específicos

Antecedentes familiares de IC/miocardopatía periparto Relación (20 caracteres).....
Cardiopatía congénita CIA CIV Ductus Otra Describir:(20 caracteres)
Eisenmenger Corrección quirúrgica Shunt residual HTP post-cirugía Colagenopatía Describir
.....(20 caracteres) Otra enfermedad sistémica Describir(20 caracteres)
Cardiopatía Izquierda Tipo de disfunción: Sistólica Diastólica Cardiopatía valvular ICC previa
Tiempo de evolución __ meses CF_ Internación previa Angina crónica Infarto Revascularización
Cirugía valvular Fibrilación auricular Describir cardiopatía(20 caracteres) TVP
Síndrome antifosfolípido Anticuerpo lúpico Abortos Anticonceptivos
N° Embarazos previos __ N° Partos previos __ N° Cesáreas previas __

IC: insuficiencia cardíaca. CIA: comunicación interauricular. CIV: comunicación interventricular. ICC: insuficiencia cardíaca crónica. HTP: hipertensión pulmonar. CF: clase funcional. TVP: trombosis venosa profunda.

Evolución del embarazo

Fecha de finalización __/__/____ Modo de finalización _____ Razón _____
Recién nacido _____ Semana gestación __ Peso del RN _____
Complicaciones en el embarazo HTA gestacional Preeclampsia Eclampsia EAP Disección aórtica
Infarto de miocardio Desprendimiento de placenta RCIU Diagnóstico de miocardopatía periparto

RN: recién nacido. HTA: hipertensión arterial. EAP: edema agudo de pulmón. RCIU: restricción del crecimiento intrauterino.

Tratamiento durante el embarazo

Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg Hidroclorotiazida
Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina Estatinas Otro hipolipemiente
Labetalol Metil Dopa Clonidina Sulfato de Mg

IECA: inhibidores de la enzima convertidora de angiotensina. ATII: angiotensina II. AAS: ácido acetil salicílico.

Tratamiento actual

Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueantes cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg Hidroclorotiazida
Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina Estatinas Otro hipolipemiente
Requirió asistencia ventricular Trasplante cardíaco

IECA: inhibidores de la enzima convertidora de angiotensina. ATII: angiotensina II. AAS: ácido acetil salicílico.

Control post-embarazo

Fecha __/__/____
Internación Fecha __/__/____ Causa _____ Muerte: Fecha __/__/____ Causa: _____
Score de congestión post embarazo: Disnea _ Ortopnea _ Edema _ Ingurgitación yugular _ Rales _
Necesidad de aumento de diuréticos _ Aumento de peso > 1 Kg _
Betabloqueantes droga _____ dosis _____ mg/d IECA droga _____ dosis _____ mg/d
Inhibidores ATII droga _____ dosis _____ mg/d Bloqueadores cálcicos droga _____
Antagonista aldosterónico droga _____ dosis _____ mg/d Furosemida Dosis _____ mg Hidroclorotiazida
Nitritos AAS Amiodarona Digoxina Anticoagulantes Ivabradina Estatinas Otro hipolipemiente
Recomendaciones para embarazo posterior Para La lactancia

IECA: inhibidores de la enzima convertidora de angiotensina. ATII: angiotensina II. AAS: ácido acetil salicílico.

F.- REGISTRO de INSUFICIENCIA CARDIACA DESCOMPENSADA y ANEMIA

Diagnóstico _____ Lugar de evaluación _____ Fecha de diagnóstico __/__/____
Hematocrito __, % Hemoglobina __, g/dl VCM __, fl HbCM __, pg CHbCM __, g/dl Saturación __%
Ferritina __, Ferremia __, Transferrina __, Reticulocitos __, LDH __, EPO _____
Tipo de anemia _____
Tratamiento de la anemia Inicio _____ Tiempo de uso __ meses
Hierro1 _____ Vía _____ Dosis __, mg
Hierro2 _____ Vía _____ Dosis __, mg
EPO _____ Dosis semanal _____ U
Acido fólico Vitamina B12 Polivitamínicos Transfusiones

VCM: Volumen corpuscular medio. HbCM: hemoglobina corpuscular media. CHbCM: concentración de hemoglobina corpuscular media LDH: lactato deshidrogenasa. EPO: eritropoyetina.

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