



CRISIS HIPERTENSIVAS

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OBJETIVOS

1

INICIAR EL TRATAMIENTO INMEDIATO


2

**PREVENIR Y DISMINUIR EL DAÑO
A ORGANO BLANCO**





EPIDEMIOLOGIA

- ❖ LA HIPERTENSION AFECTA A MAS DE 65 MILLONES DE PERSONAS EN EUA .
 - ❖ AFECTA AL 30% DE LA POBLACION MAYOR DE 20 AÑOS
 - ❖ EL 1 A 2 % ACUDEN A SERVICIO DE URGENCIAS POR ELEVACIONES DE LA PRESION ARTERIAL
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DEFINICIONES

2003	JNC 7	CLASIFICACION
BP CLASE	SISTOLICA mmHg	DIASTOLICA mmHg
Normal	< 120	<80
Prehipertensiòn	121 – 139	80 - 89
Edio I	140 - 159	90 – 99
Edio II	> O = 160	> O = 100

SI LA PAS ERA MAYOR A 179 mmHg O PAD MAYOR A 109 mmHg

CRISIS HIPERTENSIVA

DEFINICIONES

CATEGORIA	SISTOLICA	DIASTOLICA
Optima	< 120	<80
Normal	120 a 129	80 a 84
Normal elevada	130 a139	85 a 89
Hipertensiòn grado 1	140 a159	90 a 99
Hipertensiòn grado 2	160 a 179	100 a 109
Hipertensiòn grado 3	> O = 180	> O = 110
Hipertensiòn sistòlica aislada	> O = 140	< 90

PAS MAYOR DE 180 mmHg O PAD MAYOR DE 110mmHg

CRISIS HIPERTENSIVA



DEFINICIONES

1.- HIPERTENSION SEVERA

HAS excede 180 / 110 mmHg en ausencia de síntomas solo cefalea leve o moderada .

2.- URGENCIA HIPERTENSIVA

HAS excede 180 / 110 mmHg en presencia de síntomas severos sin daño a òrgano blanco



3.- EMERGENCIA HIPERTENSIVA

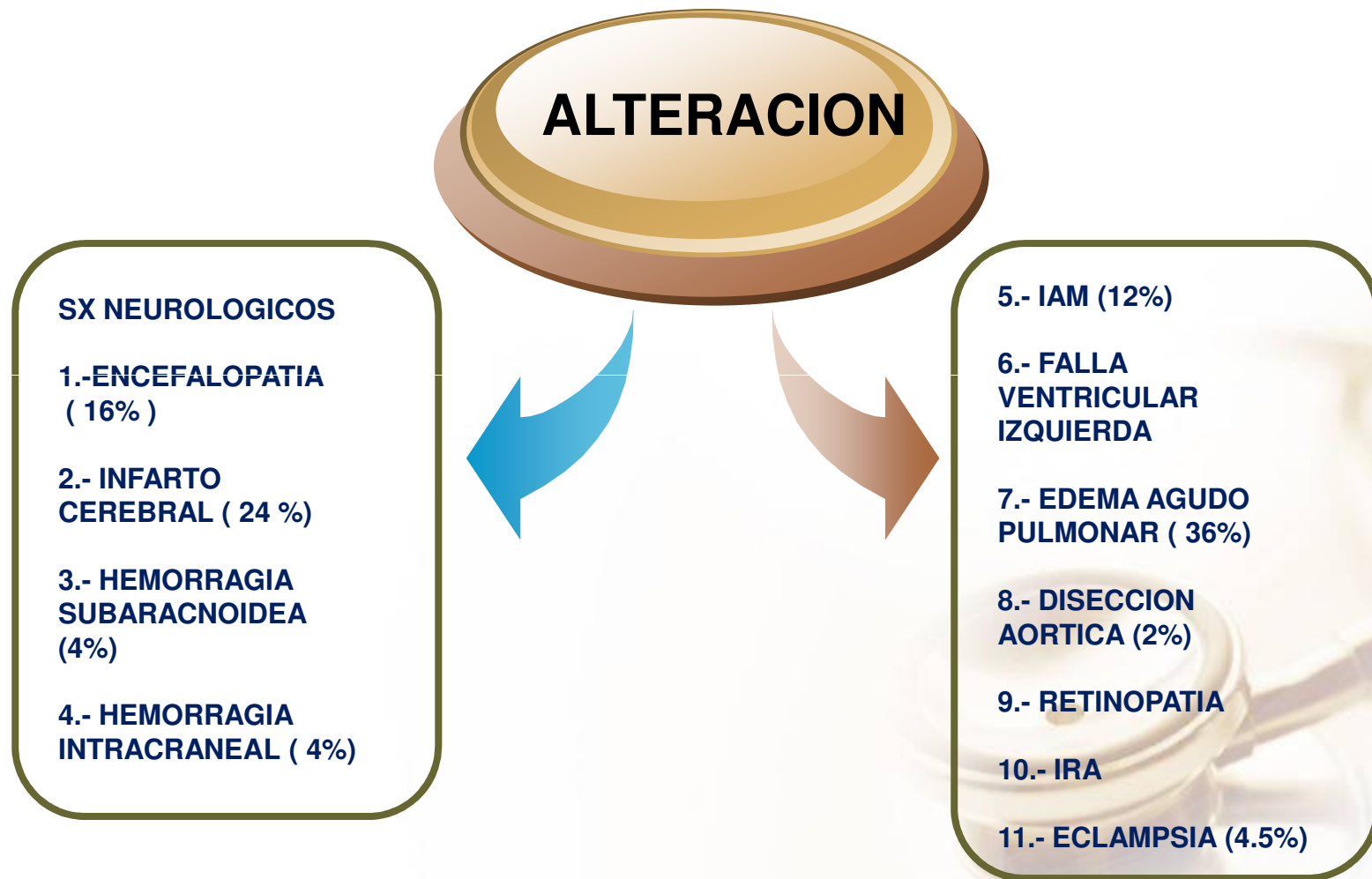
HAS de $> 220/140$ mmHg agregándose una disfunción de órgano blanco .

FISIOPATOLOGIA

CRISIS HIPERTENSIVA



PRESENTACION CLINICA



TRIAGE

Triage of patients with very elevated blood pressure

Severe hypertension

Blood Pressure

>180/110 mm Hg

Clinical features: symptoms

May be asymptomatic; headache

Clinical features: findings

No acute target organ damage

Immediate goal

Lower blood pressure within days

Treatment setting

Outpatient

Medications

Long-acting, oral

Follow-up

Within 3–7 days

Blood Pressure
Clinical features: symptoms

Clinical features: findings

Immediate goal

Treatment setting
Medications

Follow-up

Hypertensive urgency

> 180/110 mm Hg
Severe headache, dyspnea, edema

Acute target organ damage usually
absent, but may include elevated
serum creatinine

Lower blood pressure within
24–72 hours

Usually outpatient
Oral medications with rapid onset
of action; occasionally
intravenously
Within 24–72 hours

Blood Pressure

Clinical features: symptoms

Clinical features: findings

Immediate goal

Treatment setting

Medications

Follow-up

Hypertensive emergency

Often $>220/140$ mm Hg

Chest pain, severe dyspnea,
altered mental status, focal
neurologic deficit

Life-threatening target organ
damage (eg, acute myocardial
infarction, stroke,
encephalopathy, acute renal
failure, heart failure)

Immediate blood pressure
reduction; decrease by
15%–25% within 2 hours

Inpatient, intensive care unit

Intravenous medication

As appropriate after hospital
management



TRATAMIENTO

Preferred medications for hypertensive urgencies

Agent	Dose	Onset of action	Comment
Labetalol	200–400 mg po	20–120 min	Bronchoconstriction, heart block, aggravate heart failure
Clonidine	0.1–0.2 mg po	30–60 min	Rebound hypertension with abrupt withdrawal
Captopril	12.5–25 mg po	15–60 min	Can precipitate acute renal failure in setting of bilateral renal artery stenosis
Nifedipine, extended release	30 mg po	20 min	Avoid short-acting oral or sublingual nifedipine due to risk of stroke, acute myocardial infarction, severe hypotension
Amlodipine	5–10 mg po	30–50 min	Headache, tachycardia, flushing, peripheral edema
Prazosin	1–2 mg po	2–4 hours	Syncope (first dose), tachycardia, postural hypotension



Preferred medications for hypertensive emergencies

Agent	Dose	Onset/duration of action (after discontinuation)	Precautions
Parenteral vasodilators			
Sodium nitroprusside	0.25–10.00 µg/kg/min as intravenous infusion; maximal dose for 10 min only	Immediate/2–3 min after infusion	Nausea, vomiting, muscle twitching; with prolonged use, may cause thiocyanate intoxication, methemoglobinemia acidosis, cyanide poisoning; bags, bottles, and delivery sets must be light-resistant
Glyceral trinitrate	5–100 µg as intravenous infusion	2–5 min/5–10 min	Headache, tachycardia, vomiting, flushing, methemoglobinemia; requires special delivery systems due to the drug's binding to polyvinyl chloride tubing





Agent	Dose	Onset/duration of action (after discontinuation)	Precautions
Nicardipine	5–15 mg/h intravenous infusion	1–5 min/15–30 min, but may exceed 12 h after prolonged infusion	Tachycardia, nausea, vomiting, headache, increased intracranial pressure, possible protracted hypotension after prolonged infusions
Verapamil	5–10 mg intravenous; can follow with infusion of 3–25 mg/h	1–5 min/30–60 min	Heart block (first-, second-, and third-degree), especially with concomitant digitalis or β -blockers; bradycardia
Fenoldopam	0.1–0.3 mg/kg/min intravenous infusion	<5 min/30 min	Headache, tachycardia, flushing, local phlebitis
Hydralazine	10–20 mg as intravenous bolus or 10–40 mg intramuscularly; repeat every 4–6 h	10 min intravenous/>1 h (intravenous); 20–30 min intramuscularly/4–6 h intramuscularly	Tachycardia, headache, vomiting, aggravation of angina pectoris
Enalaprilat	0.625–1.250 mg intravenous every 6 h	15–60 min/12–24 h	Renal failure in patients with bilateral renal artery stenosis; hypotension



Agent	Dose	Onset/duration of action (after discontinuation)	Precautions
Parenteral adrenergic inhibitors			
Labetalol	10–80 mg as intravenous bolus every 10 min; up to 2 mg/min as intravenous infusion	2–5 min/2–4 h	Bronchoconstriction, heart block, orthostatic hypotension
Esmolol	500 µg/kg bolus injection intravenously or 25–100 µg/kg/min by infusion; may repeat bolus after 5 min or increase infusion rate to 300 µg/kg/min	1–5 min/15–30 min	First-degree heart block, congestive heart failure, asthma
Phentolamine	5–15 mg as intravenous bolus	1–2 min/10–30 min	Tachycardia, orthostatic hypotension





Company
LOGO

GRACIAS

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