



## Hypertensive Crisis

Mustafa Samir Smaiem

AL-Maarefa University – College of Medicine, Saudi Arabia.

### Abstract:

Hypertensive crises refer to clinical situations in which the blood pressure is elevated and there is either acute (hypertensive emergencies) or impending end-organ damage (hypertensive urgency). Examples of impending end-organ damage include papilledema, shortness of breath, and pedal edema. Historically, hypertensive urgencies have been defined as diastolic blood pressures  $\geq 120$  mm Hg. It is important to remember, however, that the absolute blood pressure is not as critical as the degree and rate of increase from baseline blood pressure.

### Epidemiology:

Although approximately 60 million Americans have hypertension, only 1% develop hypertensive crises. The typical patient who presents with a hypertensive crisis is 40-50 years of age, male, noncompliant with hypertensive therapy, lacks primary care, and uses illicit substances and/or alcohol. Any disorder that causes hypertension can give rise to a hypertensive crisis, but the most common cause is poorly controlled essential hypertension. Other etiologies include medications and antihypertensive withdrawal syndromes, illicit drugs, renal and pregnancy-related diseases, vasculitis, postoperative hypertension, coarctation of the aorta, burns, and pheochromocytoma.

### PATHOPHYSIOLOGY :

The pathophysiology of hypertensive crises is not completely understood. With mild-to-moderate elevations in blood pressure, arterial and arteriolar vasoconstriction initially maintains tissue per-



fusion while preventing increased pressure from being transmitted to more distal vessels. With severe elevations in blood pressure (i.e.  $> 180/110$  mm Hg), this autoregulation fails, and increased pressure in capillaries leads to endothelial damage of the vascular wall, causing fibrinoid necrosis and perivascular edema. Fibrinoid necrosis obliterates the vascular lumen, resulting in organ damage.

### Biography:

Mustafa Samir Smaiem is a fifth-year graduate of AL-Maarefa University and he was also an Emergency Medical Technician, International Medical Conference Speaker, International Speaker, Oral Presentation about Generalized Anxiety Disorder and Panic Disorder in 12th Worldwide Psychiatry and Mental Health in 19-8-2020. He is BLS and First Aid Instructor (AHA, ESCI).

International Conclave on Hypertension and Healthcare | July 19, 2020 | Vienna, Austria.

**Citation:** Wearable PEEP Mouthpiece Improves Oxygenation in COVID-19 Patients - Thomas Waggoner; United States; Hypertension Conclave 2020; July 19, 2020; Vienna, Austria.