Διαχείριση της ‘LABILE’ υπέρτασης

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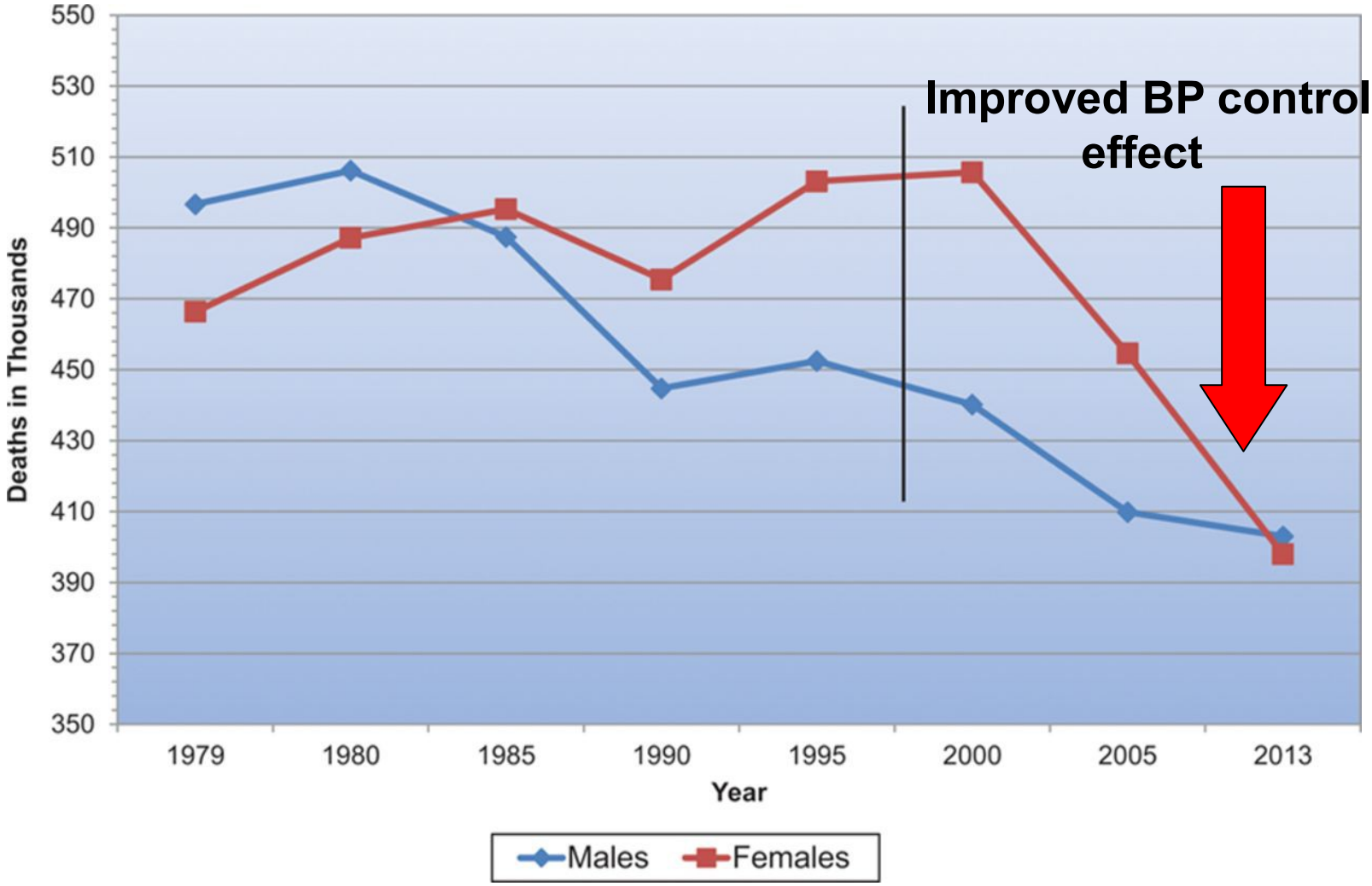
Διευθυντής Καρδιολόγος Γ.Ν.Α “ΚΑΤ”


120
80
177
102
188
93
140
93
120
90
bonafide

Cardiovascular disease mortality trends for males and females (United States: 1979–2013).



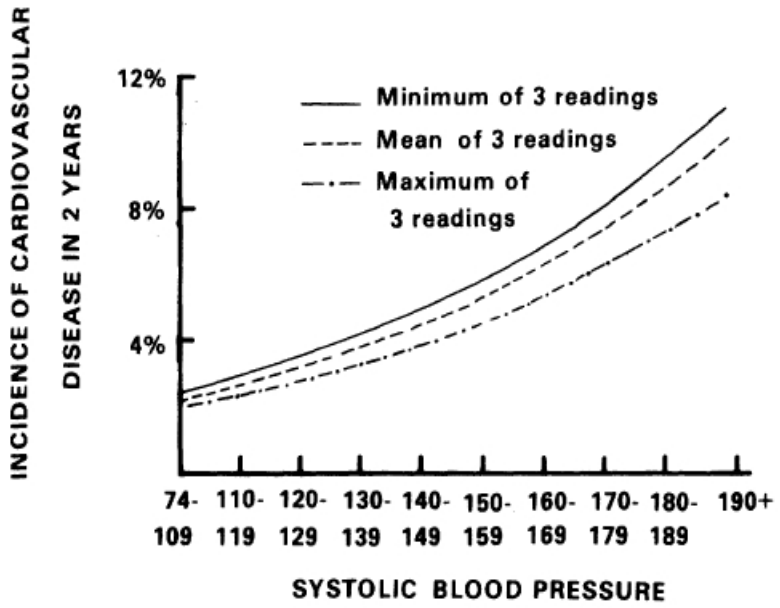
American Heart Association.

Dariush Mozaffarian et al. Circulation. 2016;133:e38-e360

Labile Hypertension: A Faulty Concept?

The Framingham Study

W. B. KANNEL, M.D., PAUL SORLIE, M.S., AND TAVIA GORDON



Labile BP elevation has less clinical significance than **"fixed Hypertension"**
The mean,minimum and maximum of 3pressures measured during an examination were equally efficient predictors of CVD.

Circulation 1990

Review Paper

The Clinical Spectrum of Labile Hypertension: A Management Dilemma

Samuel J. Mann, MD

Ironically ,in the 1960s through the 1980s,the term labile hypertension was defined between normotension and sustained hypertension ,with readings varying above and below the cutoff points of 140/90 mmHg.

Journal of Hypertension 2009

Blood Pressure Lability as a Clinical Dilemma

The alerting phenomenon (white coat hypertension)

Labile hypertension (including preprocedural hypertension)

Paroxysmal hypertension

Normal lability in patients with vulnerable underlying conditions

Cerebral aneurysm

Chronic aortic dissection

Amyloid angiopathy

Marfan syndrome

Angina

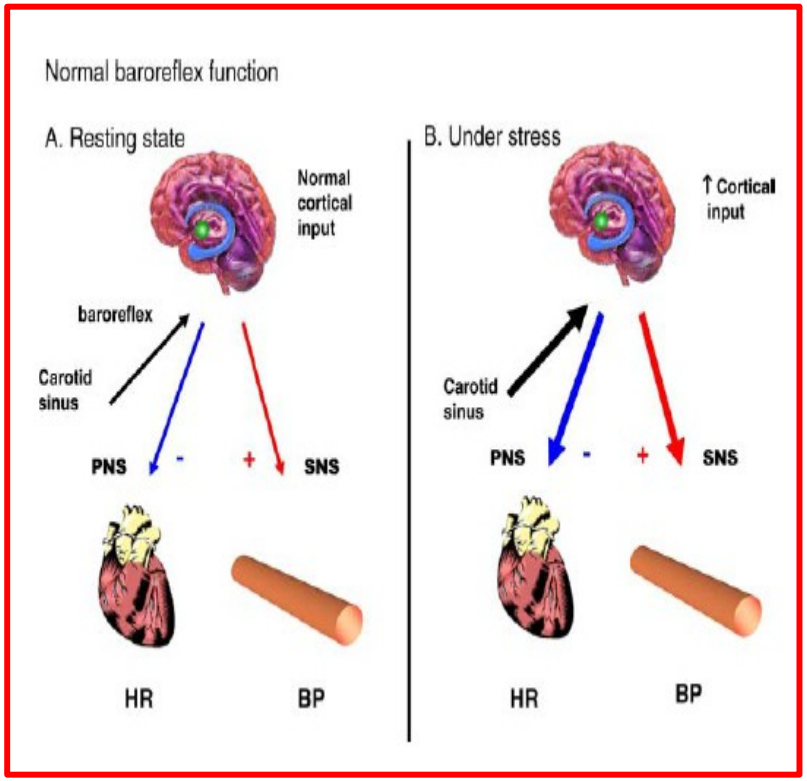
The alerting Phenomenon

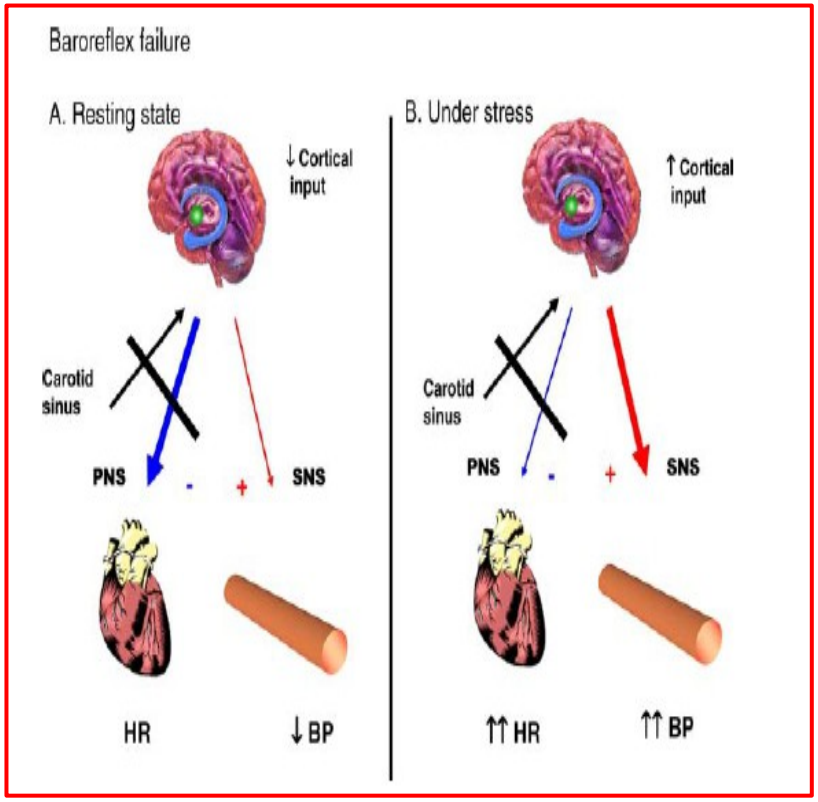
The alerting phenomenon is the tendacy of BP to rise at the time of measurment ,but NOT always due consciously anxienty over the measurment – WCH.
Studies shows that pts with WCH do not have abnormal lability outside of physicians office.
WCH is associated with lower CV risk than is sustained hypertension but the organ damage and CV risc is greater than in normontesive pts.

Labile Hypertension

The rise of BP is due:Anxiety ,emotional distress and are likely mediated by sympathetic activation .
Palpitations ,headacke or flushing but usally are Asymptomatic.
The BP falls spontaneously without intervention.

Baroreflex function





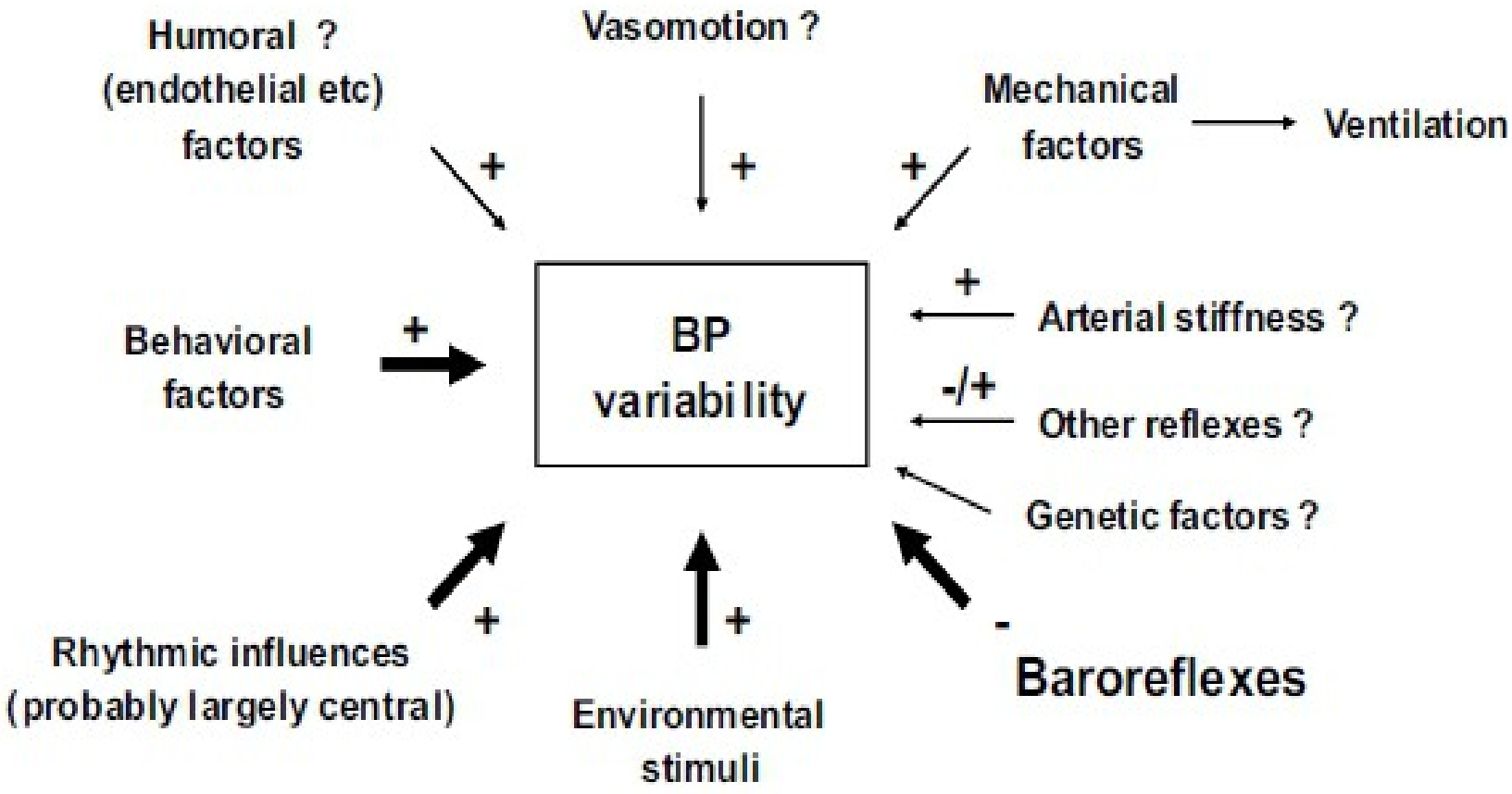
Labile Hypertension

- Labile hypertension may be due to hyperthyroidism, reno-vascular hypertension, seizure disorder, migraine, alcohol withdrawal, carcinoid syndrome, panic disorder, baroreflex failure, or drugs such as cocaine, amphetamines, or clozapine.
- Baroreflex failure should be considered in the differential diagnosis of labile hypertension, especially in subjects with a history of neck injury or neck irradiation.
- Treatment of baroreflex failure is aimed at reducing blood pressure surges and avoiding hypotensive episodes.

Labile vs paroxysmal HT

Differing Manifestations of Labile vs Paroxysmal Hypertension	
LABILE HYPERTENSION	PAROXYSMAL HYPERTENSION (PSEUDOPHEOCHROMOCYTOMA)
Can be asymptomatic or symptomatic	Markedly symptomatic
Usually triggered by a stressor and accompanied by emotional distress experienced by the patient	Usually appears out of the blue without antecedent emotional distress
Patient usually links the blood pressure elevation to emotional distress	Patient usually insists that the blood pressure elevation is not related to emotional distress

Factors involved BP variability



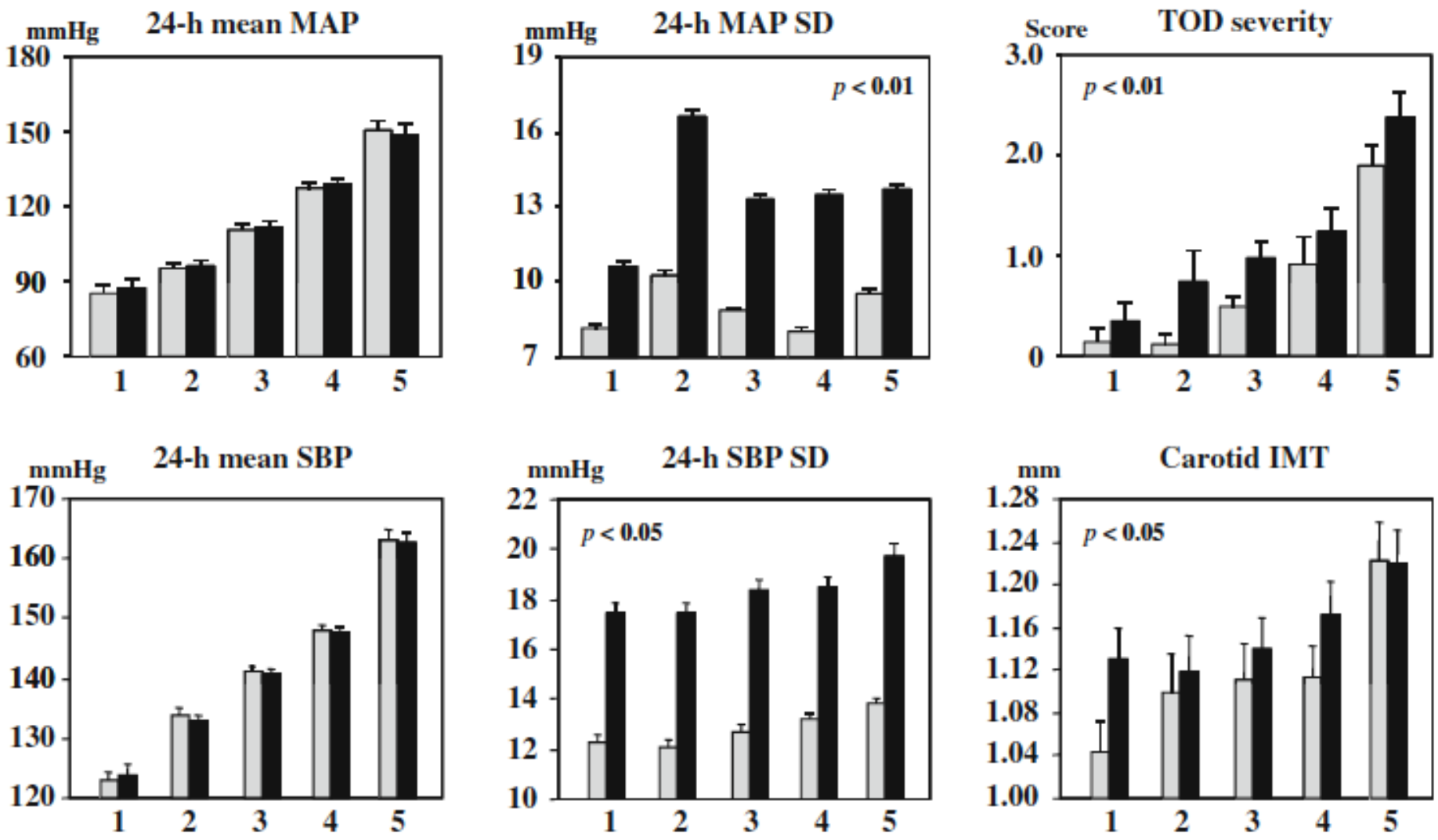
Mancia 2012

Treatment Labile Hypertension

Treatment of BP Variability ann BP Reactivity
Allerting Phenomenon
Preprocedural BP
Paroxysmal Hypertension
Acute management of Hypertensive paroxysms
Treatment pts with vulnerable undelying condition

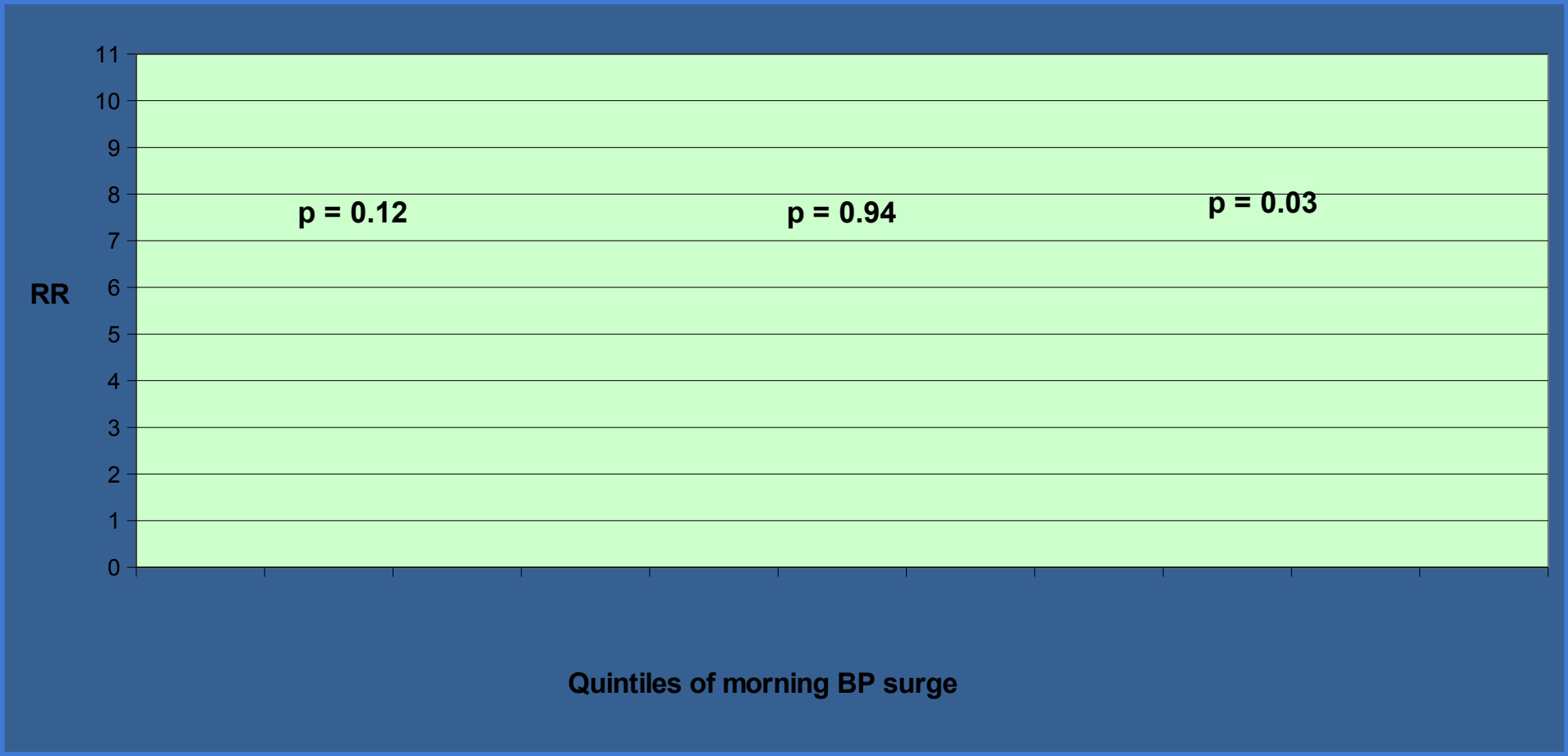
Clinical Relevance of 24h BP Variability

Study	Design	Endpoint
Parati, 1987	Cross-sectional	TOD score
Palatini, 1992	Cross-sectional	TOD score
Mancia, Parati, 2001	Cross-sectional	Carotid IMT
Liu, 2003	Longitudinal (rats)	Cardiac /renal damage
Frattola, Parati, 1993	Longitudinal	LV mass (echo)
Sander, 2000	Longitudinal	Carotid IMT / CV events
Dawson, 2000	Longitudinal	Dead / dependency (after acute stroke)
Kikuya, 2000	Longitudinal	CV mortality
Pringle, Parati, 2003	Longitudinal	Stroke
Mena, 2005	Longitudinal	CV events
Mancia, 2007	Longitudinal	CV mortality
Tatasciore, Parati, 2007	Cross-sectional	Carotid IMT, LVMI
Parati, 2009	Longitudinal	CV events
Hansen, 2010	Longitudinal	Only DBP for CV events / stroke



Mancia G, Short-Term and Long-Term Blood Pressure Variability, In Special Issues in Hypertension, 2012, A. Berbari and G. Mancia

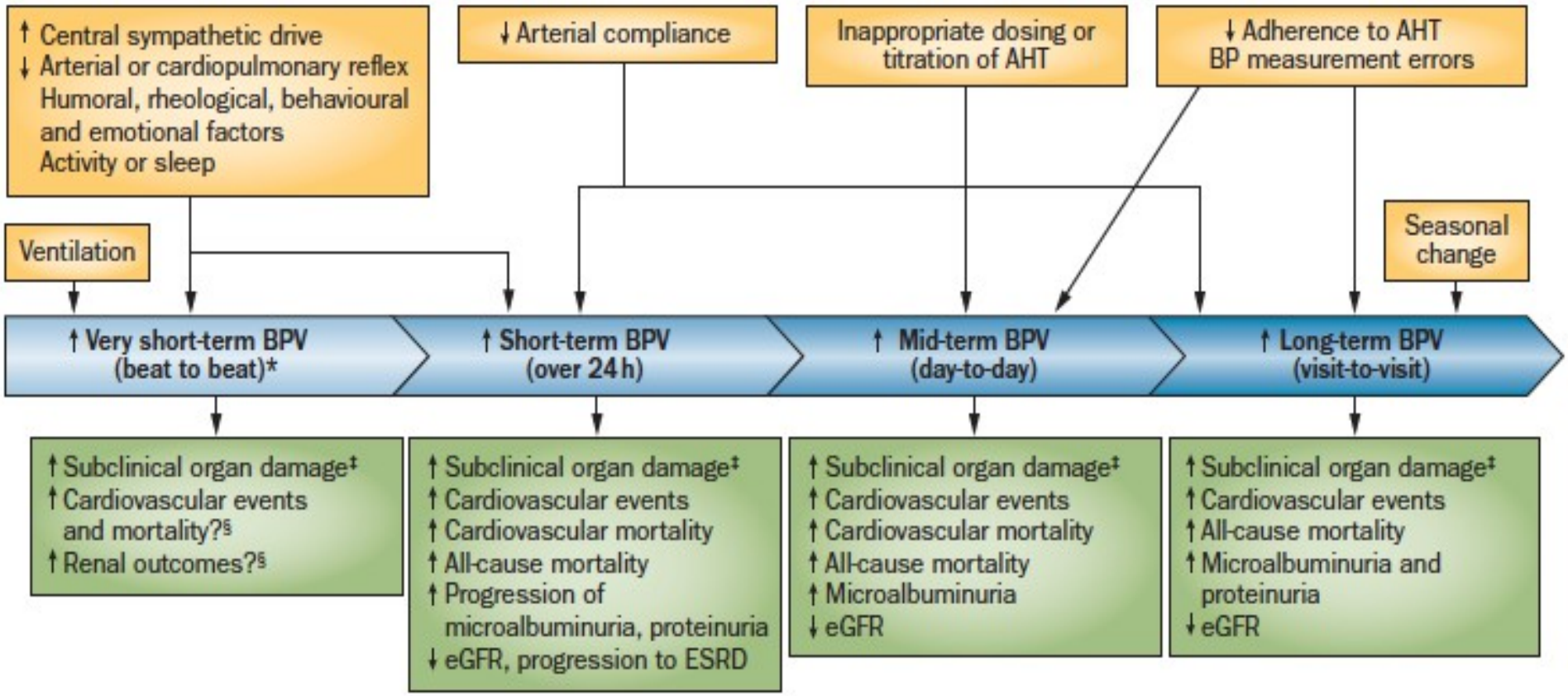
Relation Between Risk of Stroke and Morning BP Surge In The Ohasama Study



N = 1430

Metoki et al. Hypertension.2006

BPV: Types and Prognostic Significance



Parati G et al. Nature Reviews Cardiology. 2013.10:143-155

Question to be answer.....

- Average BP levels and/or BPV? Both
- Short or Long Term BPV? Mainly short
- Which measure of BPV to choose? SD
- Relationships with physiological variables (e.g. endothelial function, SpO2, arterial stiffness)? Some correlations exist ?
- BPV in Risk Stratification?

Question to be answer.....

- Is a drug-induced reduction in BPV accompanied by a reduction in event rate?

- Do different drug classes have a different effect on BPV and on outcome?

  Probably CCBs and long-acting ARBs?

- Is there enough evidence to consider BPV as a new target for treatment?

Question to be answer……

- 24 h BP values more closely related to TOD and future events than office readings
- **Higher 24 h BP Variability = Higher CV risk**
- Long lasting CCBs seem to score best in reducing short term and long term BPV
- Prospective outcome studies needed to confirm that treatment-induced reduction in BPV improves outcome.

Allerting phenomenon –WCH

- The treatment of WCH ,It would seem unneccesary ,and perhaps harmful

- Treatment should be aimed at reducing home BP,IF it is elevated using the usual pharmacologikal agents

Prepocedural BP elevation

- Prophylactic BP elevation

  Oral a-blocker plus b-blocker for 2-3 days and or anxiolytic agent

  Acute management IV labetalol and or anxiolytic agent

Severe labile hypertension

- Acute management

Indications for acute management not established

Consider IV labetol if severe or symptomatic elevation

Chronic management

Oral a-blocker plus b-blocker +other agents if resting BP is elevated

Runaway anxiety about BP readings

Acute management NO

Chronic a-blocker plus b-blocker

Paroxysmal hypertension

- Acute management of paroxysms:

  Severe paroxysm e.g BP >220mmHg or diastolic BP>130mmHg

  IV Labetalol or nitroprusside

- Milder paroxysms:

  Central a-agonist e.g Clonidine and/or anxiolytic or a-blocker plus b-blocker with fairly rapid onset e.g labetolor or metoporol plus prazosin

- Chronic preventive management:

  Less intensive regimen:a-blocker plus b-blocker

  Antidepressant agent –selective serotonin reuptake inhibitor or tricyclic agents.

Normal lability in pts with vulnerable underlying conditions

- Oral a-blocker +b-blocker combined with other agents to achieve lowest acceptable resting BP.

Take home message

- Althrough the management of labile forms of hypertension is frequently encountered clinical dilemma specific criteria or clinical trials **do not exist** .

- Studies to assess the effects of labile hypertension and outcome of treatment are needed

- The clinical spectrum of this problem and a treatment approach based on published reports and physiologic principles has been presented.