

EFFECT OF THERMOTHERAPY ON PUNCTURES OF INTERNAL VASCULAR ACCES FOR HEMODIALISYS

S. Rubio, P. Estruga, V. Esteve Simó, I. Tapia. Functional Unit Vascular Access (FUVA). Nephrology and Vascular Surgery Department* Hospital de Terrassa. Consorci Sanitari Terrassa (CST). Barcelona

BACKGROUND

✓ Patients in hemodialysis (HD), with internal vascular access (AV), require multiple AV punctures during their stay in HD.

✓ This punctures in some occasions there can be painful.

✓ There is some evidence in the literature about the analgesic effect of thermotherapy.



OBJECTIVE

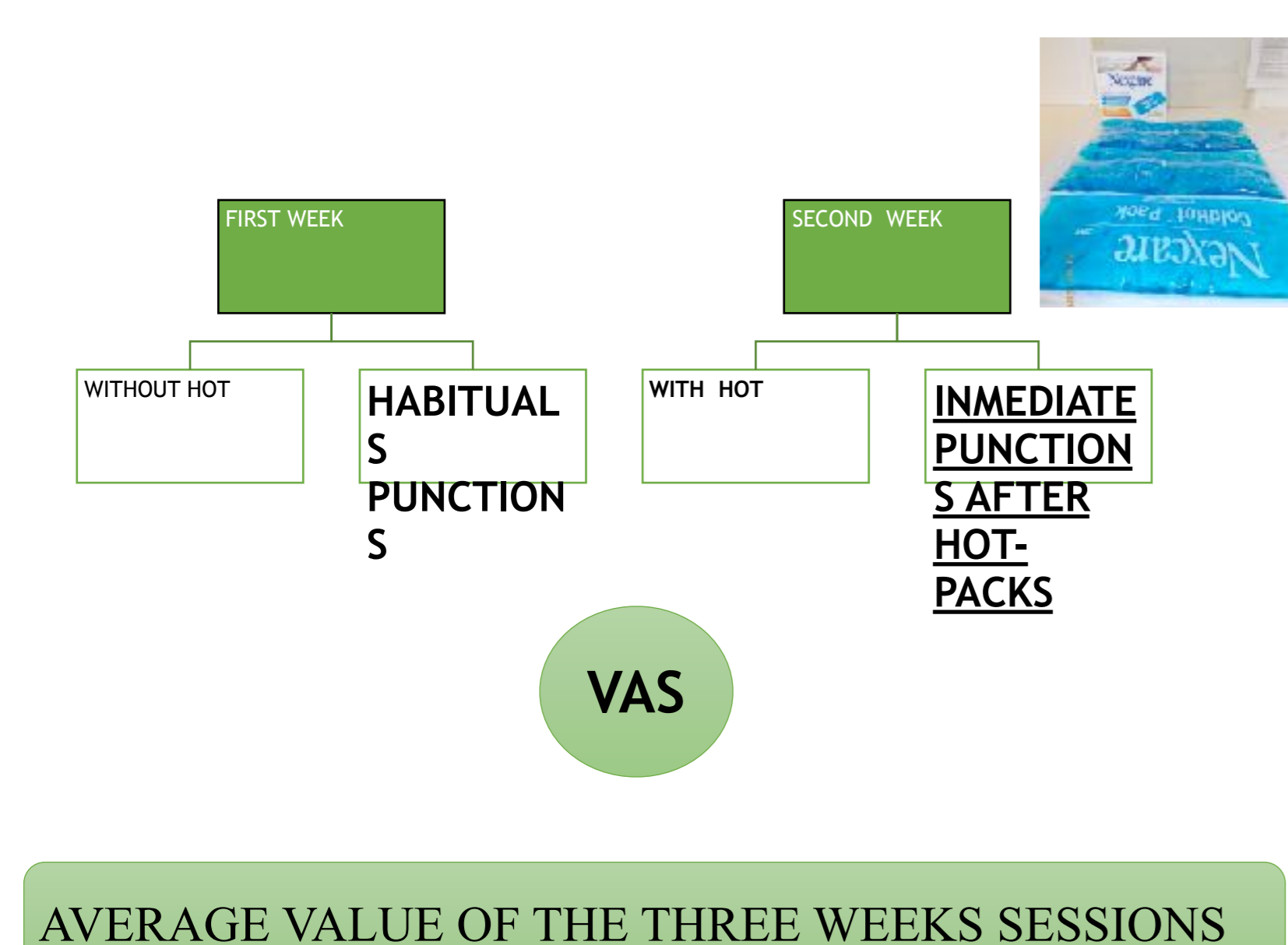
Evaluated the analgesic effect derived from thermotherapy on the punctures of the internal AV in our patients in HD.

MATERIAL AND METHODS

A 2 weeks single-center prospective study.

Analyzed data:

- 1.- Demographic data and AV type
- 2- Amount of pain through Visual Analog Scale (VAS).
- 3.- Haemodynamic data.
- 4.- Local complications (burns) and AV complications, (haematomas, thrombosis...).



Heat application



15 minutes



Quantification of pain VAS (Visual Analog Scale)



RESULTS

DEMOGRAPHIC DATA

61 patients in HD :

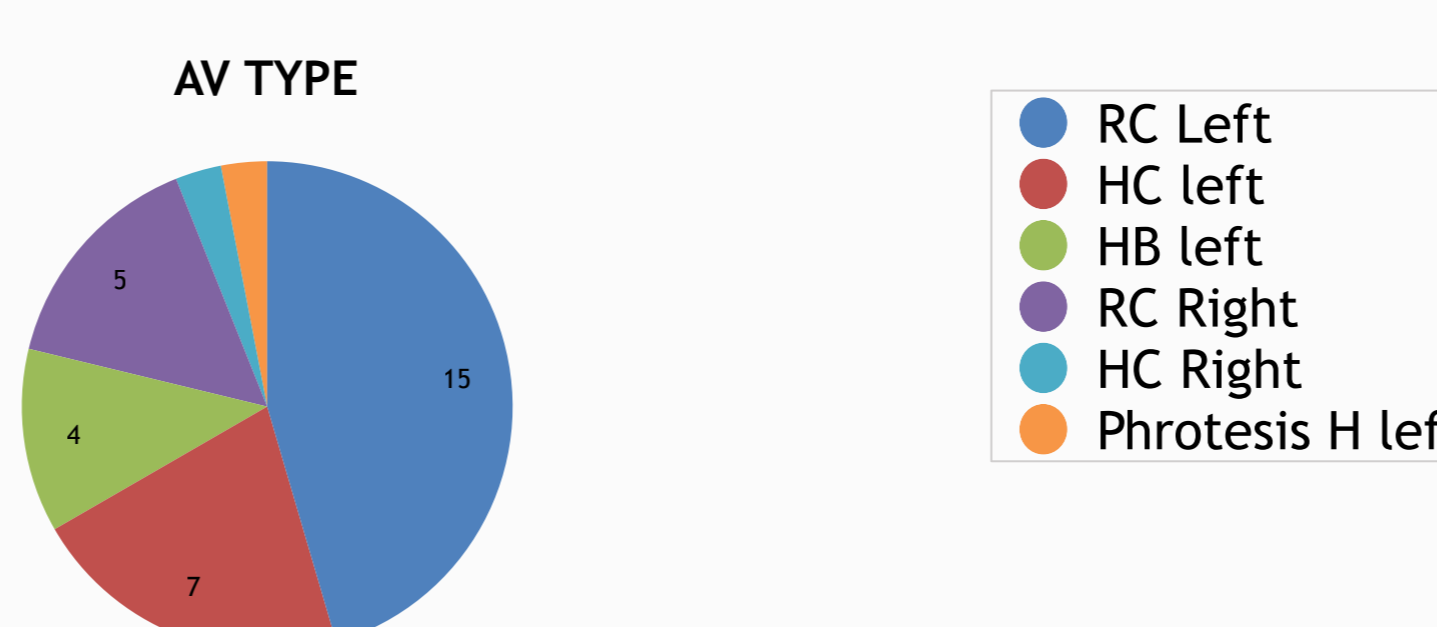
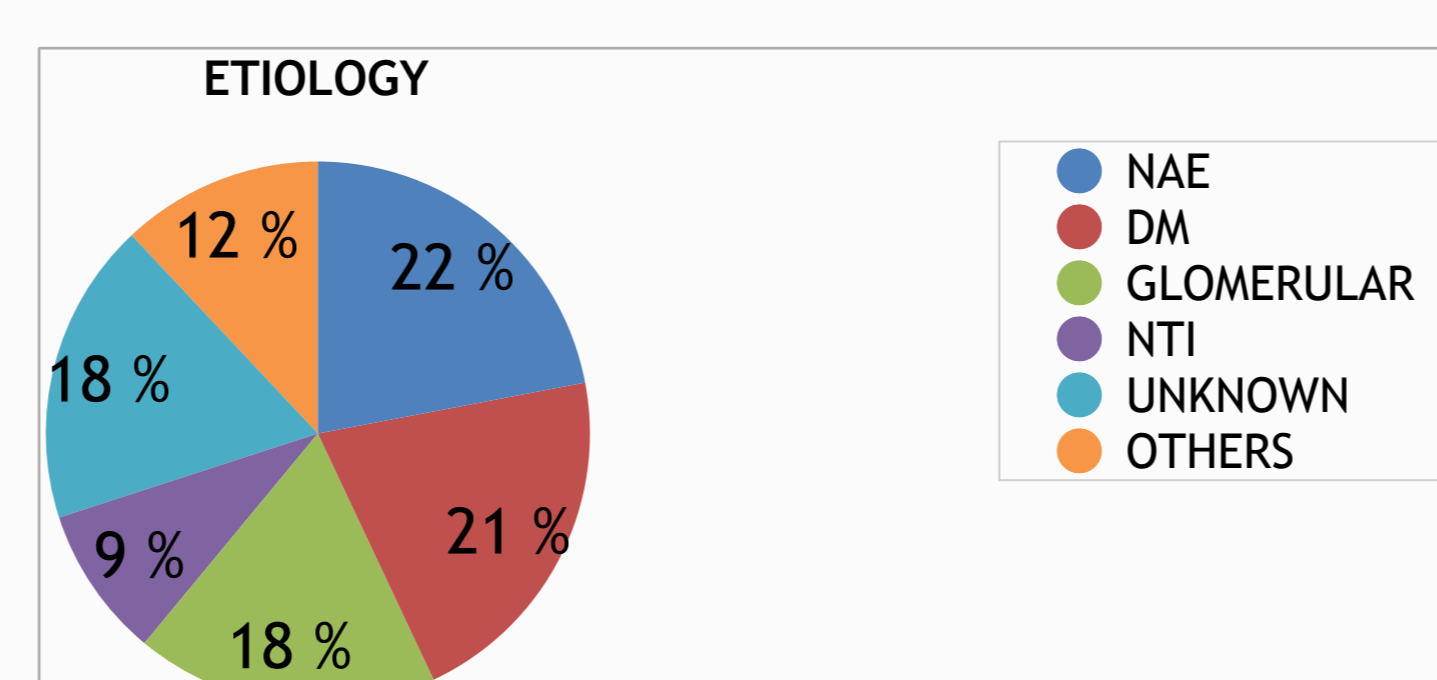
- 43 AV native or protesic.
- 33 patients included.

60,6% men.

I. Charlson. $7,6 \pm 3,1$

Mean Age: $67,3 \pm 16,4$

Months in HD: $49,1 \pm 66,3$

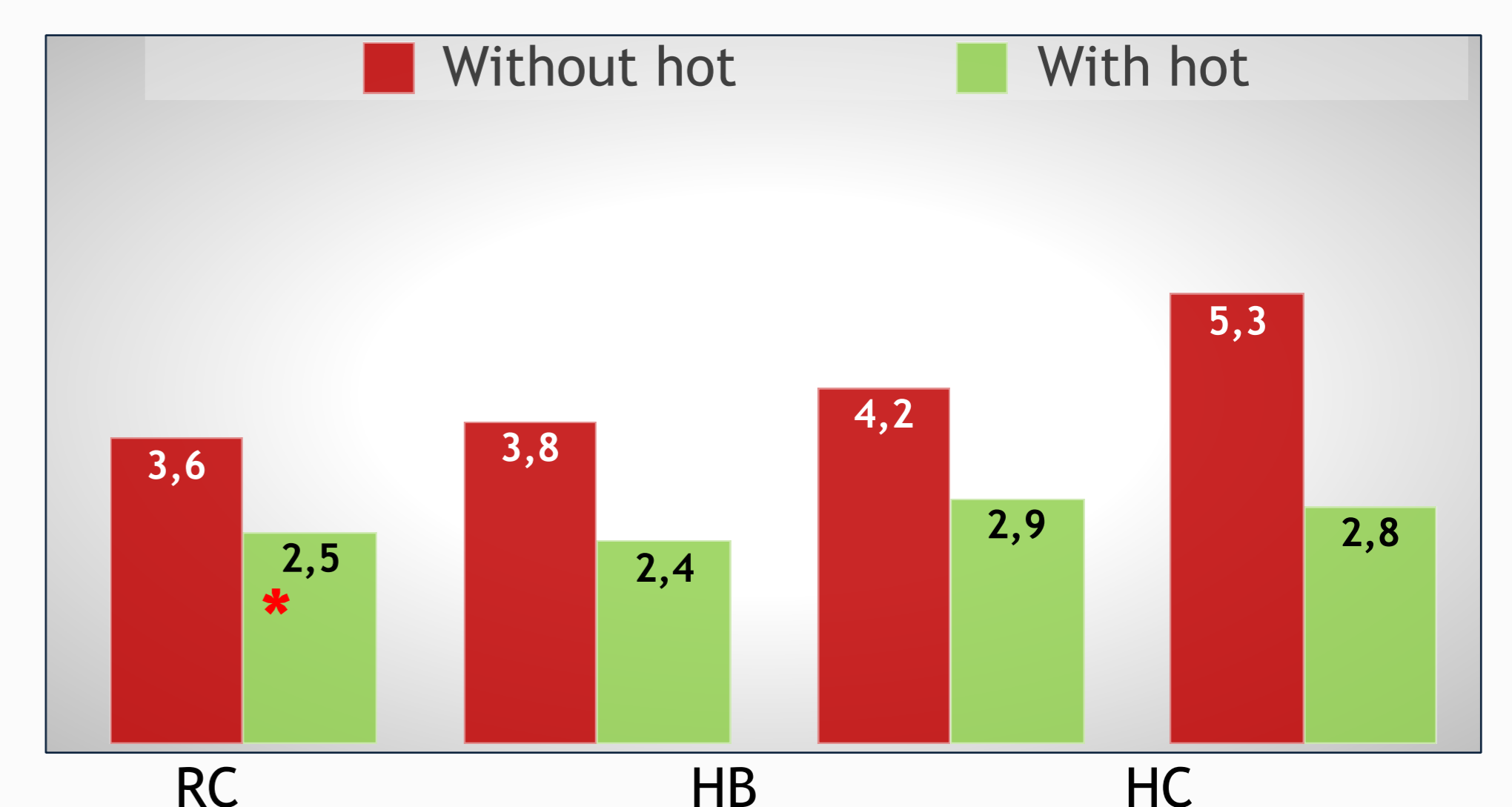
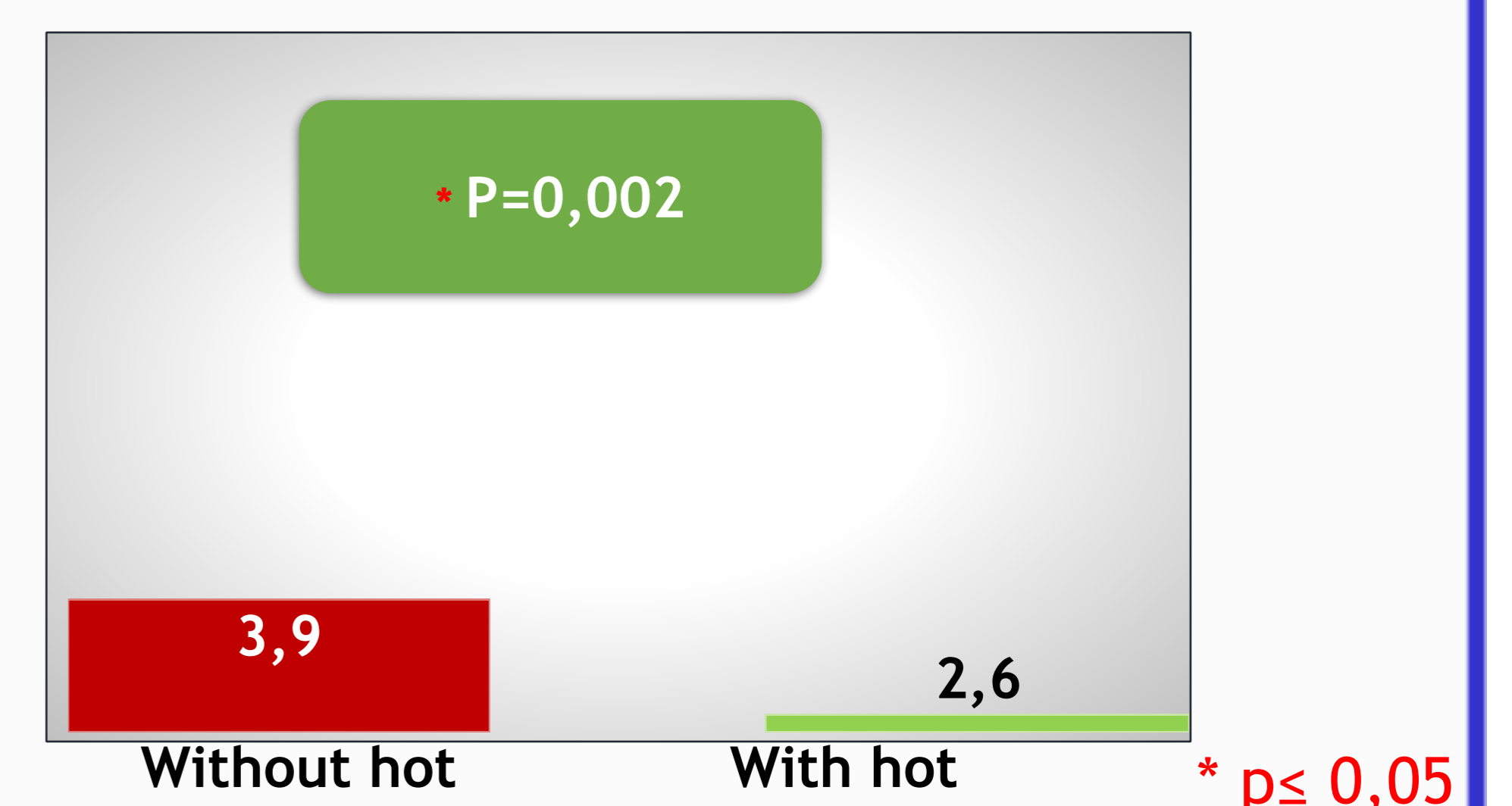


Punctures AV

Half punctures/week/pacient $6,03 \pm 0,2$

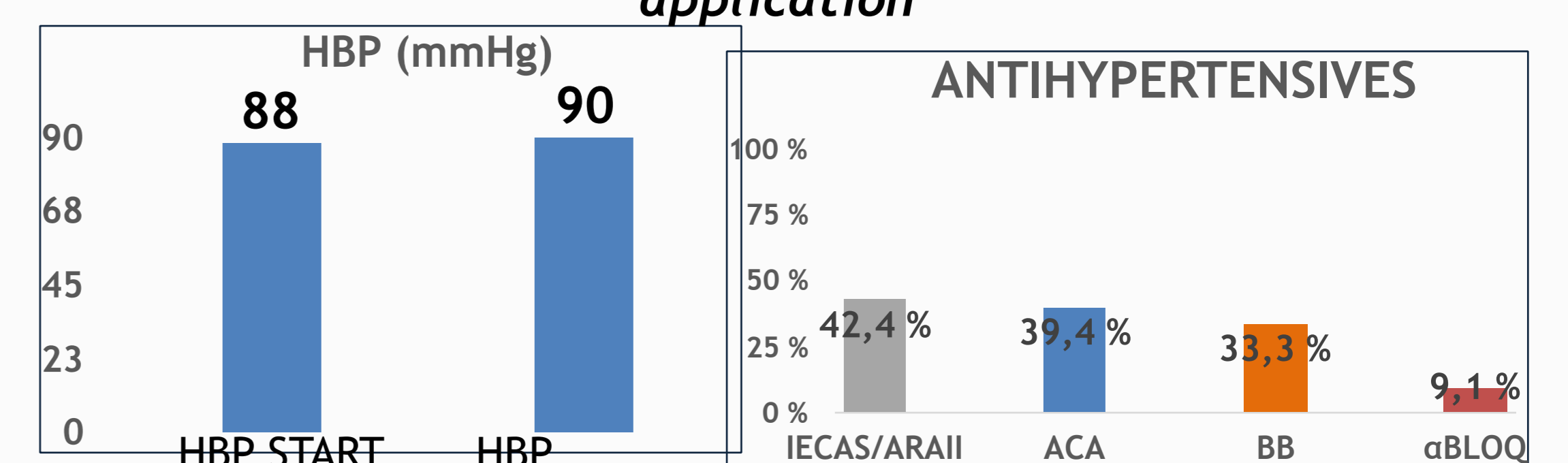
Half of VAS* $3,8 \pm 2,4$

*Visual Analog Scale



p 0,042 0,285 0,093 0,317

Were observed a significant decrease in VAS with hot application



No changes significatives were observed in haemodynamic data

UN ABANDONMENT!!



MILD SURFACE BURN



NEXT HD SESSION

CONCLUSIONS

1.-. The application of local heat (thermotherapy), about vascular access, managed to reduced the pain on the punctions in our patients.

2.-. No serious complications were observed related to the AV after the application of thermotherapy.

3.- Nevertheless, further studies are requires to confirm the potential effect of NMES in the vascular access maturation process.