

Joint Meeting of the European Society of Hypertension (ESH) and International Society of Hypertension (ISH)

Athens, Greece, June13-16, 2014 - Megaron Athens International Conference Center

Welcome
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Status : Processed
Received the : 13/01/2014 (dd/mm/yyyy)
Evaluation : ACCEPTED AS POSTER PRESENTATION

If the abstract will be accepted, the presentation will be made as following.

Presentation date : 15/06/2014
From time : 14:00
To time : 15:30
Where :
Room : Room 13
During the session : IMAGING MODALITIES - NEW THERAPEUTIC DEVELOPMENTS

Notes from the Scientific Secretariat :

Technical notes : Poster size: cm 90 (width) x cm 150 (height). The format must be VERTICAL. Please check the number of your poster directly on-site at the Posters' Secretariat Desk

Constraint : Reminder: registration is compulsory in order to present an abstract during the Meeting

Other information :
Speech start time :
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Minutes available for presentation : 0
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IMPORTANT INFORMATION

- **Registration is compulsory in order to present an abstract during the Meeting.**
- Each presenting Author is allowed to present **up to 3 abstracts** with one paid registration.
- Please note that for the first time a **special registration fee of € 150,00** has been introduced, for those Authors of accepted abstracts who are younger than 30 years old.
- If the presenting Author will be awarded a **grant**, a paid registration is not needed.
- HYPERTENSION 2014 allows the submission of abstracts for **original contribution** to the field only.

Investigators' Grants Request

The Hypertension 2014 Athens Meeting provides a number of grants to presenting authors with limited financial resources whose abstracts have been selected for either oral or poster presentation. The Program Scientific Committee will assign the grant based on score and on the degree of need for support of the applicant.

NOTE:

1) **Investigators' grant request has to be made at the same time as the abstract submission.** Request sent after the abstract submission will not be considered.

2) Please note that if the **same group of authors** submit more than one abstract, the grant will be assigned only once.

Every changes (name or email) must be communicated in written to: hypertension2014.abstract@aimgroup.eu

Are you interested in obtaining an investigator grant (detailed information about what the grant includes will soon be published on the Congress website)? **No**

Preferred presentation type:

NO PREFERENCE

List of authors:

Title	First name initial(s) only	Family name / Surname	Affiliation number/s	Presenting Author
1. Dr.	S.	GHIONE	1	Yes
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3. Dr.	R.	SCURI	3	
4. Dr.	D.	LAPI	3,4	
5. Prof.	A.	COLANTUONI	4	
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Abstract Categories (Topics):

NEW THERAPEUTIC DEVELOPMENTS

Abstract Title :

THE HYPOTENSIVE AND BRADYCARDIC EFFECTS OF MOUTH OPENING: EVIDENCE IN THE HUMAN

Abstract Body :

Objective

The face is an important source of cardiovascular ("trigemino-cardiac") reflexes. Studies in rats (Lapi Arch.Ital.Biol 151:11-23,2013) and humans (Brunelli Arch.Ital.Biol 150:231-237,2012) have shown that submaximal mouth opening (mandibular extension:ME), obtained by a dilatator for 10min, associated to partial masticatory movements in humans (dynamic ME), induces a prolonged reduction of blood pressure (BP), by about 20mmHg in the anesthetized rat and by 10mmHg in the normotensive volunteer (NTV), with a concurrent decline of heart rate (HR).

Design and method

In this study we assess the effects on BP and HR of ME without masticatory movements (static ME) obtained by a commercial mouth gag (Molt) in 20 NTV (age range 26±2.9yrs; 10M, 10 F) who made in random sequence: 1.) ME (60% of maximal active mouth opening) for 10min (experimental), 2.) keeping for 10min a tongue depressor between the medial incisor teeth (control). BP and HR were measured every 10min by Spacelabs 9027, for 30min before and 120min after the procedure. The subjects remained seated watching nature documentaries

Results

ME induced a slight significant reduction of systolic (S)BP (-4mmHg, $p=0.025$, for at least 90min) and HR (-8bpm, $p<0.001$, for the entire follow-up). Control procedure induced a slight significant increase of diastolic (D)BP (+3mmHg, $p=0.011$) and a decrease of HR (-5bpm, $p=0.005$). A significant inverse correlation was found for ME between basal values and their maximal change for SBP ($p=0.005$) and HR ($p=0.026$). Comparison of the effects of ME and control by overall repeated measure ANOVA revealed a statistically significant different effect for HR for both absolute values and changes relative to basal values ($p=0.013$ and $p=0.023$). For changes relative to basal values for SBP and DBP the effect fell short of statistical significance ($p=0.062$ and 0.059). Preliminary results of absolute values in 6 non-treated hypertensives revealed a reduction of SBP (-20mmHg $p<0.001$), SBP (-9mmHg, NS) and HR (-8bpm $p<0.001$).

Conclusions

These results confirm in NTV slight persistent effects of mouth opening on BP and HR and suggest that static procedures may be less effective than a dynamic ones in NTV, but may be effective in hypertensives.

Equipment :

ONLY PC DATA PROJECTION WILL BE AVAILABLE

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