P2.2: ULTRASOUND SPECKLE TRACKING HELPS IDENTIFY VULNERABLE CAROTID PLAQUES

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VASCULAR WALL
CAROTID PLAQUE MICROVASCULATURE ASSESSED USING DYNAMIC
P2.1
Conclusion
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between Ktrans of these various regions of the vascular wall and their individ-
vulnerability, respectively. We investigated systematically the correlation
vessel (adventitia) or in the entire vessel wall (including plaque and adven-
titia) and plaque region, separately. For 10 patients, CD31 immunohistochemistry
was performed on specimens (containing mainly plaque) removed during ca-
dition analysis revealed the association between PWV decrease and
doses of RAAS-inhibitors and amloidipine (p = -0.58, r = -0.45, p < 0.05)
Discussion:
Although Ktrans assessed over various regions within the vascular
was significant difference in baseline PWV (G1 15.9 ± 2.5 vs G2 13.6 ± 1.9 vs G3
10.9 ± 1.7 m/s; p < 0.05), but at the end of the study PWV was similar:
respectively, 13.0 ± 2.1, 13.1 ± 1.9 and 13.4 ± 1.9 m/s, 72.7% pts in G1 and
66.7% in G2 received the highest recommended doses of RAAS-inhibitors
and A10mg vs 28.6% in G3 (Pearson r = -0.9, p < 0.05). Indapamide SR 1.5mg
was added in 36.4%, 20% and 9.5%, respectively. Correlation and multiple
impact of this new approach on cardiovascular subclinical atherosclerosis
Methods: A quantitative standardized sonographic carotid intima media
thickness and plaque formation(IMPlus®). IM Plus® distribution was
done in accordance with the previously published protocol. (A, being a value
lower than the P50, <0.700 mm; B, being a value between P50 and P90,
0.700 and 0.850 mm; C, being a value between P90 and P125, 0.851-0.948
mm; D, being a value between P125 and P200, 0.949-1.300 mm; E, value above
P200 >1.300 mm; P means percentile). (Prevention Con-
cept® Database)
Results: Distribution of IMT Plus® categories in the Netherlands and V5
The Netherlands (mean age 53 years, 60 % men) Total number of cases per
category: Total:N = 18.703(100%); A:N = 2685(14.4%); B:N = 6425(34.4%); C:N = 6600(35.3%);
D:N = 2372(12.7%); E:N = 571(3.0%)
US (mean age 50 years 49% men) Total number of cases per category;
Total:N = 29.894 (100%) A:N = 960(15%); B:N = 10403(26%); C:N = 13199(34%);
D:N = 7888(19%); E:N = 2403 (3%)
Conclusions: The benchmark of ten years of IMT Plus® results in the
Netherlands shows a different picture category A (normal risk),
but a greater number of category B (25% increased risk) and a smaller amount
of category D (100% increased risk) and category E (200% increased risk) in
the Netherlands. The US still leads in the extent and severity of Subclinical Ca-
rotid Atherosclerosis but the Netherlands is rapidly catching up. Carotid
IMPlus® remains a reliable surrogate to assess atherosclerosis development.

P2.2
ULTRASOUND SPECKLE TRACKING HELPS IDENTIFY VULNERABLE
CAROTID PLAQUES
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Purpose: Atherosclerosis has become a global disease and risk factor mitiga-
tion has been a priority in counties like the Netherlands. We assessed the
impact of this new approach on cardiovascular subclinical atherosclerosis
and cardiovascular risk factors.

Methods: A quantitative standardized sonographic carotid intima media
thickness and plaque formation(IMPlus®). IM Plus® distribution was
done in accordance with the previously published protocol. (A, being a value
lower than the P50, <0.700 mm; B, being a value between P50 and P90,
0.700 and 0.850 mm; C, being a value between P90 and P125, 0.851-0.948
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the Netherlands. The US still leads in the extent and severity of Subclinical Ca-
rotid Atherosclerosis but the Netherlands is rapidly catching up. Carotid
IMPlus® remains a reliable surrogate to assess atherosclerosis development.

P2.4
FEASIBILITY OF AORTIC ARCH MECHANICS - A STUDY IN NORMAL
SUBJECTS
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There are no data in the literature regarding aortic arch mechanics assessed
with 2D speckle tracking (2D-ST) echocardiography.
Purpose: To study the feasibility of measuring vascular mechanics in the
aortic arch with 2D-ST echocardiography and to define normal values.