

Abstracts udtaget til foredragskonkurrencen

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Abstract 1

Secondary prevention including Ambulatory Blood Pressure monitoring afterstroke in patients selected for intensive outpatient rehabilitation

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Background

Today, secondary prevention after stroke is taken care of mainly by general practitioners (GP's) using Office Blood Pressure (OBP) assessment of hypertension. Is this approach satisfactory when evaluated by ambulatory blood pressure (ABP) monitoring? And to what extent are levels of other modifiable risk factors satisfactory?

Material and methods

In a prospective observational study, 45 stroke patients aged 25 – 64 years and selected for highly specialized intensive and costly outpatient rehabilitation were monitored by OBP and ABP on average 1.3 years post stroke. Besides, data on additional risk factors and medication for secondary prevention were collected. Risk factors and medication were evaluated according to international recommendations.

Results

OBP and daytime ABP exceeded the treatment goal of 130/80 mmHg in 71% and 44% of the patients. ABP exceeded the night-time goal of 115/65 in 55 %. Normal dipping at night was found in 41% (systolic) and 30% (diastolic). Considering both day-and night-time blood pressure, antihypertensive medication was absent or inadequate in 61%. LDL levels exceeded the recommended limit of 2.5 mmol/l in 51%.

Conclusion

With regard to BP and cholesterol, much remains for secondary prevention to become satisfactory.

Compared to OBP, ABP demands more resources but yields more reliable results and also important information about diurnal BP variation. Therefore, ABP monitoring at least once after stroke should be a matter of course.

Abstract 2

Final Results of the Surprise Study: Long-term Monitoring For Atrial Fibrillation (AF) in Cryptogenic Stroke.

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Background

The true frequency of AF in patients with cryptogenic stroke or TIA is not well defined. The aim was to estimate the frequency and burden of AF in patients with apparent cryptogenic minor stroke or TIA by long term monitoring providing complete data on arrhythmia occurrence.

Methods

Patients with minor stroke or DWI-positive TIA were included if stroke causation remained unknown during standardized work up including 24 hours telemetry.

A Reveal XT®, an atrial fibrillation sensitive loop-recorder, was implanted subcutaneously allowing continuous monitoring for up to 3 years. Arrhythmia episodes were adjudicated by senior consultant cardiologist. Endpoints include episodes of AF, time of AF and burden of AF. A total of 84 patients were included and had a minimum of three months of monitoring before final analysis. Five patients were explanted due to local infections or discomfort. (fig.1)

Results

In 13 patients (15.5 %) AF was documented by long term monitoring and one patient subsequently developed persistent AF.

The mean burden of AF was 2 hours pr day monitored, varying from less than a minute to 17 hours pr day monitored. (median 20 minutes pr day monitored)

Kaplan Meier (fig 2) presents time from stroke onset to first AF event, mean time was 106,0 days (SD 47,9 days)

Time from stroke onset to implantation was at a median of 56 days. (Mean 80 days, SD 74,9).

Logistic regression analysis including all elements of CHADS2VAS found increasing risk of AF with an OR = 1.096 (p=0.015) with increasing age in years. CHADS2VAS score was 4.14 in the AF group vs. 3.24 (p=0.03).

Conclusion

Paroxysmal AF is frequent and brief in patients with cryptogenic stroke. Long term monitoring resulted in change of treatment in one out of 6 patients in this cohort.

Abstract 3

Titel:Differentierede genhenvisnings-tilbud fra kommunalt regi til sygehusregi for borgere med følger efter apopleksi

Forfattere:

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Præsentation: Nogle borgere med følger efter apopleksi og anden erhvervet hjerneskade kan, ifølge Sundhedsstyrelsen, have behov for ambulans opfølgning eller at blive (gen)henvist af almen praksis til udredning og eventuel rehabilitering i sygehusregi.¹ Vi vil gerne præsentere og diskutere ud fra en iværksat model for differentierede genhenvisningstilbud til revurdering med mulighed for fornyet rehabiliteringsindsats til personmålgruppen. Tiltaget er opstået i erkendelse af og erfaring med apopleksiramtes forskelligartede behov for revurdering af rehabiliteringspotentialet i senere faser. Ordningen er praktiseret igennem flere år² i et specialiseret apopleksi-neurorehabiliteringsafsnit med indsats på hovedfunktions- og regionalt niveau.

Modellen: De gennemgående, udøvende aktører i ordningen er udpegede tværfaglige teams bestående af fysio- og ergoterapeuter, sygeplejersker og læge, med kompetenceniveau svarende til netop denne type opgave. Aktørerne samarbejder om opgaven med afsnittets neuropsykologer og logopæder, alt efter omfang og kompleksitet i borgerens udfald, samt med aktuelle kolleger i primærsektoren. Tilbuddene er: 1. En ambulans kontrol³. Dette tilbud henvender sig til personer, som har været i relativt korte, indlagte forløb, og hvor personens rehabiliteringspotentiale ikke har kunnet vurderes klart ved udskrivelsen. 5 typer af relevante patienter er beskrevet. Kontrollen kan udløse en revideret genoptræningsplan, et vurderingsophold (se nedenfor) og udløser altid epikrise og et vurderingsnotat til personalet i primærsektoren. 2. Et vurderingsophold⁴. Et vurderingsophold varer typisk 3-5 hverdage, og personen er indlagt. Et forhåndslagt program retter sig mod henvisningsårsagen og oplysninger modtaget fra samarbejdsparter i primærsektoren. Opholdet indledes med endeligt afklarende møde med borger og pårørende og afsluttes i samme forum, eventuelt med tilstedeværelse af egen læge eller anden relevant aktør/instans fra primærsektoren. Et vurderingsophold udløser, ud over epikrise, typisk en af følgende indsatser: a) En revideret genoptræningsplan, almen eller specialiseret b) Et rehabiliteringsophold i rehabiliteringsafsnittet, af individuel varighed, oftest efterfulgt af en genoptræningsplan (se nedenfor). 3. Rehabiliteringsophold efter vurdering. Dette ophold følger afsnittets forløbsprogram for neurorehabilitering af personer med apopleksi. 4. Et vurderingsbesøg hos borgeren udgået fra neurorehabiliteringsafsnittet. Dette tilbud iværksættes udelukkende, hvor det skønnes at være det mest hensigtsmæssige tilbud på flere fronter, og er meget sjældent forekommende. Her vil nære samarbejdsparter fra primærsektoren ofte deltage i erfaringsudveksling og modtage vejledning

under selve vurderingen jfr. forløbsprogrammets anbefalinger om rådgivning og kompetenceudvikling¹.

Formålet med POSTER er præsentation af en løsningsmodel om mulige tiltag i praksis for opfyldelse af anbefalingen med tilhørende nødvendige kompetencer.

Nøgleord: apopleksi, neurorehabilitering, differentierede genhenvísningstilbud

Referencer:

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3. Neurologisk afdeling. Hospitalsenheden Vest, Ambulant kontrol N3. Instruks[e-dok]
4. Neurologisk afdeling. Hospitalsenheden Vest, Vurderingsophold på N3. Instruks[e-dok]

Abstract 4

Contrast-extravasation in patients with spontaneous ICH reliably predicts hematoma expansion and outcome after 3 months

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Background:

The presence of contrast-extravasation (CA) in CT-angio (CTA) and post-contrast CT is a sign of ongoing bleeding in patients with ICH and is reported a predictor of progression and outcome

Methods:

One hundred and eighteen patients - subsequently diagnosed with spontaneous ICH- were admitted and CT-scanned with CT-C and CTA using a 64 slice MDCT within 4.5 hours of symptom onset between 2009 and 2012 in an acute stroke unit serving a population of 1.7 mio on even days. CTA was performed in the absence of contraindications in all patients with ICH; from end 2010 supplemented with 3 minutes post contrast CT-C (N=65). Follow-up CT within 72 hours after ictus was obtained in 70 patients. Outcome was assessed by modified Rankin Scale at 3 months.

All scans were evaluated by a single consultant neuroradiologist. Volumes were measured by the ABC/2 method.

Results:

Imaging was performed 2 hours (median) after symptom onset, 33 patients had CA (28%).

Hematoma expansion occurred in 33/33 patients with CA and in 1/85 with no CA; in this patient no post-contrast CT was done. Hematoma-expansion averaged 30 milliliters in patients with CA.

Median mRS was 3 (range 0-6) in patients without CA and 6 in the group with CA (range 1-6; P<0.001).

Conclusion:

CA predicts hematoma expansion and desolate 3 months outcome, whereas patients with no CA have a prognosis comparable to ischemic stroke. Hematoma expansion represents an obvious future treatment target that can be reliably predicted by standard CT protocols.

Early Post-admission Intracerebral Hematoma (ICH) Expansion.

Preliminary results from a prospective study.

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Background:

Hematoma growth occurs in approximately 30 % of patients with ICH and predicts clinical deterioration and poor outcome. The aim of the present study was to assess the temporal profile of hematoma growth by serial transcranial ultrasound volume measurements and to investigate if a treatment window for thrombostatics may exist.

Methods:

Patients admitted with primary ICH within 4.5 hours after symptoms onset underwent acute cerebral CT (CTC) and CT angiography (CTA). Hematoma volume was measured by transcranial B-mode Ultrasound (TCU) every 30 minutes during the first 6 hours, and from 6 – 12 hours every 2 hours. Predefined endpoints are hematoma volume on CTC after 24 hours or death within 24 hours. The study was approved by the Ethics Committee of the Capitol Region of Denmark under an acute waiver requiring consent from the patients' GP's after inclusion.

Results:

Nineteen patients have completed all protocol procedures from 1 September 2011 to 1 August 2012. Mean time from symptom onset to inclusion was 2 hours. Hematoma-growth was observed in 7 patients and happened in all cases as a stepwise progression. There was a significant correlation between hematoma volume on the 24 hours follow-up-scan and the one observed using ultrasound, $\rho=0.967$ (CI 0.90-0.98; $P<0.001$).

Conclusion:

TCU monitoring is feasible in patients with acute ICH depending on anatomical location and bone window. TCU volume measurements correlate well with CT. Hematoma growth occurs step-wise and a therapeutic window may exist for thrombostatic treatment.

Abstract 5

Leukoaraiosis, but not atrophy, predicts hemorrhagic transformation after i.v. thrombolysis (i.v. TPA) in ischaemic stroke.

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Background and aim: Hemorrhagic transformation (HT) is a recognised complication to i.v.TPA and evidence is conflicting regarding the influence of leukoaraiosis and atrophy on the risk of HT after i.v.TPA. Aim of the present analysis was to evaluate if leukoaraiosis or atrophy on baseline CT affected the risk of HT after i.v. TPA in acute ischaemic stroke.

Methods: Single-center prospectively collected data from consecutive patients admitted with ischemic stroke and treated with iv thrombolysis were analysed. Baseline CT was assessed for leukoaraiosis using the Fazekas score and atrophy using the Wahlund score.

Results: Three-hundred and thirty three patients received i.v.TPA from april 2009 to July 2012. Twenty-nine patients (8.8%) developed HT. Nineteen patients received endovascular treatment (EVT) after i.v. TPA and 6 of whom developed HT; patients treated with EVT were excluded from further analysis. Consequently 314 patients remained in the analysis. HT was significantly more frequent in patients with any degree of leukoaraiosis (Fazekas score 1-3) (11,5% of patients) than without leukoaraiosis (Fazekas score of 0) (5,1% of patients). In univariate analysis, any degree of leukoaraiosis increased the risk of HT OR 2.4 (95% CI, 1.4 to 5.78; $p = 0.036$). Atrophy dis not affect the risk of HT.

Conclusions: This analysis confirmed leukoaraiosis as a risk factor if HT after i.v. thrombolysis, atrophy dis not affect the risk of HT.