Reality of Stroke Management in Germany and how to Proceed?

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Disclosure

Speaker name:

...........S. Duda...........................................................

I have the following potential conflicts of interest to report:

☐ Consulting
☐ Employment in industry
☐ Stockholder of a healthcare company
☐ Owner of a healthcare company
☐ Other(s)

☒ I do not have any potential conflict of interest
Supraregional SU (Status May 2017)
45 Minutes Ground Bourne Transport
Appr. 4,000 Strokes in (Neuro)Radiological Database on a Voluntary Basis (2015)

In Germany 13,000 ICT to be Expected
Flächendeckende Akutversorgung von Schlaganfallpatienten durch die (Neuro-)Radiologie ist gewährleistet

Nationwide Care for Acute Ischemic Stroke Patients is Ensured by Radiologists and Neuroradiologists

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Berlis A et al. Flächendeckende Akutversorgung von... Fortschr Röntgenstr 2017; 189: 303–308
Germany:
Level 2, Module E
Certification
Dec. 2017:
321 certified RADs / NRADs
Concepts for ICT

1. **Regional** SU and *Patient* Transport (drip and ship and re-ship)
2. **Regional** SU and *Expert* Transport to SU
3. **Supra-regional** SU with Interventional Capabilities
4. **STEMO** – prehospital Lysis and Selection of Suitable SU
5. or - ICT may develop eventually into a Daily Practice Intervention
291 certified Stroke Units

169 Regional Stroke Units *
111 Supraregional Stroke Units **
11 Telemedical Stroke Units

* 9 Comprehensive Stroke Units
** 12 Comprehensive Stroke Units

85% of Supraregional Stroke Units NRAD, 15% with RAD only

[Status: 15.09.2016]
Source: Stiftung Deutsche Schlaganfall-Hilfe
Karte erstellt mit RegioGraph 8,
Kartengrundlage GfK MACON GmbH
Patient Transport to Physician

Regional Stroke Unit

- Supraregional Stroke Unit
- Neurovascular Network
- Large regional SU with Interventional Capabilities
Doomsday for Primary Stroke Centres?

Bypassing primary stroke centre reduces delay and improves outcomes for patients with large vessel occlusion

Niwar Faisal Mohamad¹,², Sidsel Hastrup¹, Mads Rasmussen³,⁴, Mikkel Strømgaard Andersen²,⁵, Søren Paaske Johnsen², Grethe Andersen¹ and Claus Ziegler Simonsen¹

Conclusion: Direct transfer of patients with suspected large-vessel occlusion to a comprehensive stroke centre leads to shorter treatment times for endovascular therapy patients and is, in turn, associated with an increase in functional independence. We recorded no adverse effects on intravenous tissue plasminogen activator treatment times or outcome.

N = 476 Patients in Denmark
Physician Transport to Patient

- Supraregional Stroke Unit
- Neurovascular Network
- Large regional SU with interventional capabilities
Physician Transport to Patient is a No-Go

Expertise in Target Clinic
Numerous Hospitals
Changing Teams
Alien Surrounding
Differing Angio Suites
Varying Stock of Dedicated Devices
Transport Cost
QUICKER ONSET OF TX
HIGHER RATE OF LYSIS

POSSIBLE TOOL FOR CENTER SELECTION IN BIG CITIES
Scenario: ICT as a Daily Practice Intervention

What about other specialities?
Mechanical thrombectomy in acute ischemic stroke: Consensus statement by ESO-Karolinska Stroke Update 2014/2015, supported by ESO, ESMINT, ESNR and EAN

Nils Wahlgren¹,², Tiago Moreira¹,², Patrik Michel³, Thorsten Steiner⁴,⁵, Olav Jansen⁶, Christophe Cognard⁷, Heinrich P Mattle⁸,⁹, Wim van Zwam¹⁰, Staffan Holmin¹¹, Turgut Tatlisumak¹²,¹³,¹⁴, Jesper Petersson¹⁵,¹⁶, Valeria Caso¹⁷, Werner Hacke⁴, Mikael Mazighi¹⁸, Marcel Arnold⁸,⁹, Urs Fischer⁸,⁹, Istvan Szikora¹⁹, Laurent Pierot²⁰, Jens Fiehler²¹, Jan Gralla²², Franz Fazekas²³; Kennedy R Lees²⁴,²⁵ for ESO-KSU, ESO, ESMINT, ESNR and EAN

- Mechanical thrombectomy should be performed by a trained and experienced neurointerventionist who meets national and/or international requirements (Grade B, Level 2b, KSU Grade B) — changed in level of evidence.

Level 2b, Grade B
Credentialing in Germany

Radiology Board 5 yrs
Neuroradiology Board + 3 yrs.

Module E (intracranial recanalisation) requires:

- 100 interventions, with a min. of
- 30 extracranial
- 30 intracranial
- 30 related CME points
Oral and written exam since 2016

Further: 50 interventions per year
Embolectomy for stroke with emergent large vessel occlusion is highly stressful, even for the most experienced interventionalists. It involves working in hostile anatomy, time pressure, moving and uncooperative patients, technical challenges and there are high stakes involved. These are exciting times, but also challenging times. Pride, ego, and turf have no place in patient care, writes Manraj Heran.
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