

Risk factors of stroke mortality in the African region: a cohort study

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Background: Population-based cohort studies of risk factors of stroke are scarce in developing countries and none has been done in the African region. We conducted a longitudinal study in the Seychelles (Indian Ocean, east of Kenya), a middle-income island state where the majority of the population is of African descent. Such data in Africa are important for international comparison and for advocacy in the region.

Methods: Three examination surveys of cardiovascular risk factors were performed in independent samples representative of the general population aged 25-64 in 1989, 1994 and 2004 (n=1081, 1067, and 1255, respectively). Baseline risk factors data were linked with cause-specific mortality from vital statistics up to May 2007 (all deaths are medically certified in the Seychelles and kept in an electronic database). We considered stroke (any type) as a cause of death if the diagnosis was reported in any of the 4 fields in the death certificates for underlying and concomitant causes of death.

Results. Among the 2479 persons aged 35-64 at baseline, 280 died including 56 with stroke during follow up (maximum: 18.2 years; mean: 10.2 years). In this age range, age-adjusted mortality rates (/100'000/year) were 969 for all cause and 187 for stroke; age-adjusted prevalence of high blood pressure ($\geq 140/90$ mmHg) was 48%. In multivariate Cox survival time regression, stroke mortality was increased by 18% and 35% for a 10-mmHg increase in systolic, respectively diastolic BP ($p < 0.001$). Stroke mortality was also associated with age, smoking ≥ 5 cigarettes vs. no smoking (HR: 2.4; 95% CI: 1.2-4.8) and diabetes (HR: 1.9; 1.02-3.6) but not with sex, LDL-cholesterol intake, alcohol intake and professional occupation.

Conclusion. This first population-based cohort study in the African region demonstrates high mortality rates from stroke in middle-aged adults and confirms associations with high BP and other risk factors. This emphasizes the importance of reducing BP and other modifiable risk factors in high risk individuals and in the general population as a main strategy to reduce the burden of stroke.



Research Day

January 17, 2008
César Roux Auditorium

Regenerative Medecine

Unil

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Faculté de biologie
et de médecine



CHUV RESEARCH DAY 2008
Thursday, January 17th, 2008
“Regenerative Medicine”

08:30 Presentation of the 2008 Research Day
Professor Ivan Stamenkovic, Vice Dean for Research

08:45 **Keynote
speaker 1**



Professor Philippe Menasché
Department of Cardio-Vascular Surgery
Hôpital Européen G. Pompidou, Paris
“Promises and pitfalls of skeletal myoblast therapy”

09:30 **Coffee & Posters**

10:30 6 short talks

12:00 **Keynote
speaker 2**



Professor Giulio Cossu
Stem Cell Research Institute, Milano
“Towards a cell therapy for muscular dystrophy”

12:45 **Lunch, Coffee & Posters**

14:00 **Keynote
speaker 3**



Professor Michele De Luca
Department of Biomedical Sciences, Modena
Epithelial Stem Cell Research Centre, Venice
“Epithelial stem cells and regenerative medicine”

14:45 6 short talks

16:15 **Coffee & Posters**

17:00 **Keynote
speaker 4**



Professor Lior Gepstein
Dept of Physiology & Biophysics, Technion – Haifa,
Israel
*“Myocardial Regeneration by Human Embryonic
Stem Cells”*

17:45 Poster Prizes Ceremony

18:00 **Apéritif & Buffet**

ATTENDANCE IS FREE - NO REGISTRATION IS NECESSARY

NOTE: Posters will be displayed from
Wednesday January 16st early morning to Friday January 18th early morning.

12 short talks

Schedule	Names, departments	Titles
Morning		
10h30 - 10h45	Boris Hinz Laboratoire de biophysique cellulaire - EPFL	<i>"The myofibroblast - friend and foe in tissue regeneration"</i>
10h45 - 11h00	Matthias Lutolf Laboratoire de cellules souches et bioengineering - EPFL	<i>"Bioengineering artificial stem cell niches".</i>
11h00 - 11h15	Corinne Kostic Unité de thérapie génique et biologie des cellules souches – Hôpital Ophtalmique	<i>"Gene therapy preclinical studies for Leber congenital amaurosis"</i>
11h15 - 11h30	Anne Zurn Chirurgie expérimentale - CHUV	<i>"Delayed peripheral nerve priming improves regeneration of sensory axons into the spinal cord following dorsal root injury."</i>
11h30 - 11h45	Meta Djojosebroto Unité de thérapie génique et biologie des cellules souches – Hôpital Ophtalmique	<i>"Increased chromosomal aberrations and transformation of adult mouse retinal stem cells"</i>
11h45 - 12h00	Paola Bonfanti Chirurgie expérimentale - CHUV & Laboratoire de dynamique des cellules souches - EPFL	<i>"Thymic epithelial cells have skin potency"</i>
Afternoon		
14h45 - 15h00	Dominique Pioletti Laboratoire de biomécanique en orthopédie - EPFL	<i>"In Vivo evaluation of human fetal cells as allogenic cell source for tissue engineering"</i>
15h00 - 15h15	Mikaël Martino Laboratoire de médecine régénérative et de pharmacobiologie - EPFL	<i>"Controlling mesenchymal stem cells response to biomaterials with recombinant integrin- specific fibronectin fragments"</i>
15h15 - 15h30	Dela Golshayan Néphrologie et Centre de Transplantation d'organes - CHUV	<i>"Mechanisms of Allograft rejection and tolerance in transplantation"</i>
15h30 - 15h45	Jonathan Bloch Médecine Interne - CHUV	<i>"Spleen derived vascular progenitor cell transfer restores metabolic and vascular insulin sensitivity in high-fat diet insulin resistant mice"</i>
15h45 - 16h00	Marc-Etienne Roehrich Cardiologie – CHUV	<i>"Immunophenotypical analysis of putative cardiac progenitor cells isolated based on high ALDH activity from adult mouse and human hearts"</i>
16h00 - 16h15	Mohamed Nemir Dpt de Médecine - CHUV	<i>"Control of cardiac integrity via the Notch1 receptor pathway".</i>