



CCM ITALIA
La community italiana per le
Malformazioni Cavernose Cerebrali
Acting locally, cooperating globally



Continuing Medical Education (CME) course/event

Friday, June 09, 2017

Aula Magna of the University of Turin at the Dental School, Lingotto, Turin, Italy

CEREBROVASCULAR MALFORMATIONS: NATURAL HISTORY, PATHOGENIC MECHANISMS, DIAGNOSIS AND TREATMENT OF CAVERNOUS ANGIOMAS AND OTHER CEREBROVASCULAR MALFORMATIONS

Scientific supervisors and coordinators:

- Prof. Saverio Francesco Retta (Department of Clinical and Biological Sciences - DSCB, University of Turin, Italy)
- Prof. Marco Fontanella (Department of Neurosurgery, University of Brescia, Italy)
- Prof. Lorenza Trabalzini (Department of Biotechnology, Chemistry and Pharmacy, University of Siena, Italy)
- Dr. Luca Goitre (Department of Clinical and Biological Sciences - DSCB, University of Turin, Italy)

Program

08:00 - 08:15 Registration of participants

08:15 - 08:45 INTRODUCTION

08:15 - 08:20 Prof. **Ezio Ghigo** – University of Turin

Welcome message from the Director of the School of Medicine of the University of Turin

08:20 - 08:25 Dott. **Guido Giustetto** – OMCeO, Turin

Welcome message from the President of the Order of Physicians, Surgeons and Dentists

08:25 - 08:30 Sig. **Massimo Chiesa** (President of Associazione Italiana Angiomi Cavernosi – AIAC)

The unwanted journey: living day-by-day with a cerebrovascular disease

08:30 - 08:45 Prof. **Saverio Francesco Retta** – Applied Biology, Turin

Cavernous angiomas: a journey back and forth from clinic to basic research

08:45 - 10:30 SESSION I - PHYSIOPATHOLOGY, CLINICAL AND DIAGNOSIS OF CEREBROVASCULAR MALFORMATIONS

Chairmen: Dr. Paolo Cerrato (Neurology, Turin), Dr. Sergio Duca (Neuroradiology, Turin)

08:45-09:15 Dr. **Paolo Cerrato** – Neurology, Turin

Different cerebrovascular malformations and different clinical features

09:15-09:45 Prof. **Mauro Bergui** – Neuroradiology, Turin

Classification of cerebrovascular malformations and diagnostic and interventional neuroradiology

09:45-10:15 Dr. **Luigi Poliani** – Pathological Anatomy, Brescia

Many cerebrovascular malformations: does pathological anatomy help us find a common pathogenesis?

10:15-10:20 Discussion

10:20 - 10:30 Break

10:30 - 12:00 SESSION II - SURGICAL AND RADIOSURGICAL APPROACHES

Chairman: Prof. Alessandro Ducati (Neurosurgery, Turin)

10:30-11:00 Dr. **Diego Garbossa** – Neurosurgery, Turin

Cerebrovascular malformations: aneurysms, AVMs, cavernomas, who operate?

11:00-11:30 Prof. **Marco Fontanella** – Neurosurgery, Brescia

Familiar and sporadic cerebrovascular malformations (CCM): clinical and neurosurgical aspects

11:30-11:55 Dr. **Piero Picozzi** – Radiosurgery, Humanitas, Milan

Therapeutic possibilities of Gamma Knife radiosurgery in AVMs and cavernomas

11:55-12:00 Discussion



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12:00 – 13:00 SESSION III - GENETIC BASES AND NEW METHODS OF MOLECULAR DIAGNOSIS OF CEREBRAL CAVERNOUS MALFORMATIONS (CCM)

Chairmen: Dr. Alfredo Brusco (Medical Genetics, Turin), Dr. Luca Goitre (Applied Biology, Turin)

- 12:00-12:10 Dr. **Luca Goitre** – Applied Biology, Turin
Genetic bases of Cerebral Cavernous Malformations: the CCM genes
- 12:10-12:30 Dr. **Marta Melis** – Neurology/Medical Genetics, Cagliari
The "Common Sardinian Mutation (CCM1-CSM)" and CCM case history in Sardinia
- 12:30-12:55 Dr. **Souvik Kar** – Neurosurgery Centre, Hannover (Germany)
Genome-Wide sequencing reveals MicroRNAs Downregulated in Cerebral Cavernous Malformations
- 12:55-13:00 Discussion

13:00 - 14:00 Lunch break

14:00 - 16:05 SESSION IV – CEREBROVASCULAR MALFORMATIONS IN THE PEDIATRIC AGE

Chairmen: Dr. Mino Zucchelli (Neurosurgery, Bologna), Dr. Carlo Arduino (Medical Genetics, Turin)

- 14:00-14:25 Dr. **Irene Toldo** – Pediatric Neurology, Padua
Cerebral Cavernous Malformations in Pediatric Age: from the onset to neurological outcomes
- 14:25-14:50 Dr. **Mino Zucchelli** – Pediatric Neurosurgery, Bellaria, Bologna
Cerebral Cavernous Malformations in Pediatric Age: Neurosurgical Aspects
- 14:50-15:15 Dr. **Marco Pavanello** – Pediatric Neurosurgery, Gaslini, Genova
Surgical indication for revascularization in Quasi-Moyamoya associated to RASopathies
- 15:15-15:35 Dr. **Alessandro Raso** – Medical Genetics, Gaslini, Genova
Moyamoya vasculopathy shows a genetic mutational gradient decreasing from East to West
- 15:35-16:00 Dr. **Valeria Capra** – Medical Genetics, Gaslini, Genova
Aneurysms of the vein of Galen and AVM: embryonic origin and pathogenesis
- 16:00-16:05 Discussion

16:05 - 16:15 Break

16:15 - 18:00 SESSION V - PATHOGENIC MECHANISMS, RISK FACTORS AND NEW DIAGNOSTIC AND THERAPEUTIC PROSPECTIVES

Chairmen: Prof. Paolo Pinton (General Pathology, Ferrara), Prof. Lorenza Trabalzini (Biochemistry, Siena)

- 16:15-16:40 Dr. **Maria Grazia Lampugnani** – General Pathology, IFOM, Milan
Pathogenic mechanisms and development of therapeutic strategies for Cerebral Cavernous Malformations in animal models of disease
- 16:40-17:05 Dr. **Saverio Marchi** – General Pathology, Ferrara
Cellular processes underlying Cerebral Cavernous Malformations: autophagy as another point of view
- 17:05-17:30 Dr. **Eliana Trapani** – Applied Biology, Turin
Role of molecular mechanisms of cell response to oxidative stress and genetic risk factors in the pathogenesis of Cerebral Cavernous Malformations
- 17:30-17:55 Dr. **Giuseppina Barrera** – General Pathology, Turin
Potential risk factors and molecular markers underlying the interindividual variability in susceptibility to develop the most severe forms of cerebrovascular disease
- 17:55-18:00 Discussion

18:00 - 18:30 Participants' questions/comments, concluding remarks and perspectives



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Corso/Convegno ECM (Educazione Continua in Medicina)

Venerdì 09 Giugno 2017

Aula Magna della Dental School dell'Università di Torino, via Nizza 230 (Lingotto, 3° p.), Torino

LE MALFORMAZIONI CEREBROVASCOLARI: STORIA NATURALE, MECCANISMI PATOGENETICI, DIAGNOSI E TRATTAMENTO DEGLI ANGIOMI CAVERNOSI E ALTRE MALFORMAZIONI CEREBROVASCOLARI

Provider

Università di Torino - Provider ID 173 - Staff Formazione ECM ecm@unito.it 011/670.5314
(Dott.ssa Chiara CORDERO) - 011/670.5315 (Sig.ra Teresa CRISTIANO)

Il corso/convegno è stato accreditato presso il Ministero della Salute con **9 crediti formativi ECM** (codice ECM 173-195824).

La partecipazione è aperta a ricercatori, medici, biologi e altre figure professionali che operano in ambito sanitario, compresi specializzandi e studenti di medicina e chirurgia (max 100 persone), previa iscrizione al seguente link:

<https://www.dam.unito.it/eventiecm/?event=le-malformazioni-cerebrovascolari-storia-naturale-meccanismi-patogenetici-diagnosi-e-trattamento>

Razionale

L'evento racchiuderà trattazioni riguardanti le principali forme di malformazioni cerebrovascolari, con un focus particolare sulle Malformazioni Cavernose Cerebrali (dette anche Angiomi Cavernosi o Cavernomi).

Si tratta di problematiche biomediche importanti per la formazione/aggiornamento dei medici, e di grande interesse per la ricerca clinica e di base. Infatti, sebbene le patologie cerebrovascolari rappresentino nel complesso la terza causa di morte e la seconda causa più comune d'invalidità neurologica nei paesi occidentali, la storia naturale, i meccanismi patogenetici e i fattori di rischio di queste malattie sono tuttora poco conosciuti, mentre le strategie terapeutiche spesso si limitano all'intervento chirurgico, peraltro non sempre possibile o risolutivo.

Il corso si prefigge di trattare queste problematiche attraverso un approccio multidisciplinare e integrato, analizzandone progressivamente la storia naturale, le manifestazioni cliniche, i nuovi metodi di diagnosi clinica, strumentale e di laboratorio, le basi genetiche e fisiopatologiche, i fattori di rischio convenzionali ed emergenti, le strategie terapeutiche chirurgiche e farmacologiche presenti e future, e l'introduzione e la valutazione di nuove linee guida diagnostico-terapeutiche.

La multidisciplinarietà è la strategia per fornire una panoramica completa ed esauriente, permettendo ai professionisti stessi, operanti in settori complementari, di valutare e comprendere la necessità di un approccio pluri-specialistico e multiprofessionale per un efficace ed efficiente management clinico delle patologie trattate.