

## Interview to Prof. Marcello Deraco (Milan, Italy) about the European School of Peritoneal Surface Oncology

The European School of Peritoneal Surface Oncology (ESPSO) is a joint venture of the European Society of Surgical Oncology (ESSO) and the Peritoneal Surface Oncology Group (PSOGI). Prof. Marcello Deraco (Milan, Italy) is the Director of the European School of Peritoneal Surface Oncology and we got to meet him a few months ago at ESSO 36 in Krakow, Poland.

### **Q: Why is there a need to provide structured training in the surgical management of peritoneal neoplasms?**

The CRS and HIPEC is a complex procedure with several technical nuances and serves to treat a broad range of clinical entities. A surgical oncologist would never get proficiency in the field without a well-structured tutored training program.

### **Q: How do you evaluate the training currently provided in Europe in this regards?**

In the early nineties, when the technique of CRS and HIPEC was introduced in Europe, some surgeons succeeded in acquiring expertise following a self-learning basis, after having visited a well-established centre in US (Dr. Sugarbaker). The learning process in these situations have been pretty much long taking more than a decade. In recent years, before the introduction of ESPSO program, the training has been acceptable only in those already internationally recognized centres founded by pioneers of the technique in Europe, where an experienced tutor used to teach the technique to youngest surgeons. With the ESPSO we are sure that the learning process will be shortened and the surgeon embarking in this field will have more consistent instruments to proceed on his own in his centre, after the completion of his training.

### **Q: What is the profile of the School participant?**

1. An active Surgical Oncologist with a preferential interest in Peritoneal Surface Oncology, seeking advanced, structured training in the field.
2. A surgeon that has completed a general surgery residency and basic surgical oncology training and/or show a continued dedication to surgical oncology in his/her clinical practice.
3. Anyone involved or have solid plans to get involved in an established or new Peritoneal Surface Oncology Treatment Programme.

### **Q: I see that the school will provide both basic and advance training: would you recommend this specialisation to a colleague at an advanced stage of his/her medical career?**

Yes, the course and training programme are continuously reviewed by the most important experts to update their contents to keep in pace with the advancement of the knowledge in the field. Even for senior surgeons with some acquaintance with the topic of peritoneal surface oncology, the ESPSO training program could be a good opportunity for refreshing.

### **Q: When and how was the School initiative launched?**

It was launched in 2014 and departed from the initiative of Dr. Santiago Gonzalez Moreno and myself. It has the scientific support of Dr. Kusamura and the logistical support of Ms Ana Galan. The program was structured taking the advantage of European Society of Surgical Oncology courses frameworks.

**Q: How does the School collaborate with PSOGI (Peritoneal Surface Oncology Group International)?**

The peritoneal surface oncology treatment programs recognised by PSOGI take place in different centres, such as Washington DC, Basingstoke, Gustave Roussy, NCI of Milan, Athens, MD Anderson of Madrid, etc. (this list could be easily obtained by the ESPSO website). Participants will attend at least one PSOGI World Congress (biannual) and one national PSO congress, recognised by PSOGI.

**Q: Participants need to submit a final research study at the end of the School. How will these studies be used?**

Yes. The completion of the program foresees the elaboration of a research project under the supervision of an established programme recognised by PSOGI, to be presented at a congress and submitted for publication at a peer-reviewed journal. This project may evolve into a thesis.

**Q: How will the School select a tutor/mentor to be assigned to each candidate?**

The tutor must be from a PSOGI recognized centre.

**Q: You have a special interest in peritoneal neoplasms: What is the role of surgery in the multidisciplinary management of peritoneal carcinomatosis?**

The surgical component of the multimodal treatment of PSM is a key element, provided that the indication of locoregional approach is correct and the quality of cytoreduction is optimal

**Q: What was the most important research advance in peritoneal neoplasms?**

The PSM represents a very heterogeneous clinical circumstance, encompassing several types of tumour with a wide range of prognostic spectrum. The CRS and HIPEC, on the other hand, is a technically demanding, resource consuming, and risky treatment that represents a tremendous economic burden for the health care system. The research in this area has pointed several important directions: refinement of indication by means of randomized clinical trials and identification of prognostic / predictive factors of treatment response; and biological investigations to clear the biological pathways involved in the peritoneal dissemination of the tumours. There is still a lot to do.

**Q: What is “the locoregional approach to peritoneal surface malignancies” and how is this combined therapy innovative?**

The locoregional approach consists of the combination of maximal surgical effort represented by the cytoreductive surgery and the intracavitary instillation of chemotherapies under hyperthermic condition. This approach is innovative as it allows to obtain the macroscopic and microscopic cytoreduction of peritoneal disseminated disease, even in cases of very high tumour burden. If the indication of the procedure is correct an enormous oncological advantage could be provided to the patient.

**Q: How are the long-term results of combined therapies monitored in your country?**

There are several ongoing multicentric registries. We are working, with the Italian Society of Locoregional Therapy (SITILLO), to unify all these registries in a single national network task force.

**Q: Did a better understanding of molecular biology and the introduction of precision medicine change the way cancer surgery is practiced in Europe?**

Yes, for sure.

**Q: How did this change the general understanding of the role and features of the peritoneum, and the management of tumours affecting this area?**

The biological research will help us to understand not only the molecular mechanisms of peritoneal progression of the tumours but also to identify prognostic factors and potential druggable biological targets. Moreover, recently we managed to elaborate a decision tree to select the best DMPM candidates for the CRS and HIPEC. This algorithm takes into account a biological feature of the tumour characterized by cell proliferation index, measured by ki-67 and disease extension. Such an instrument for patient selection is innovative as it is the first time that biological research contributed to optimize the surgical management of PSM.

**Q: Which one do you consider as the most remarkable achievement in your career?**

We have recently closed a research protocol on DMPM that was funded by the Italian Ministry of Health. The study involved a broad team of biologists and clinicians that worked in a narrow and intense collaboration, in the last 5 years, to optimize the treatment of the disease and improve our understanding of the tumour biology. Several cutting-edge insights emerged from this tremendous effort and the results will improve the survival and the quality of life of our patients in the future.

**Q: In which research studies are you involved at the moment?**

We are launching a similar translational researches protocols on pseudomyxoma peritonei and peritoneal metastasis from colorectal cancer. We are struggling to obtain financial support from non-profit organizations as peritoneal surface malignancies are not an attractive area of investment for the big pharmaceutical industries. Furthermore, at the moment one clinical trial on prophylactic HIPEC for colorectal cancer patients and one pharmacology randomised trial are active in our institution.

**Q: What are the main obstacles to working together in the clinic, in a true “multidisciplinary spirit”?**

The main difficulties are to identify potentialities of every single component of the team, maintain the unity around a single objective and to provide them a positive feed-back for their achievements in regular basis. But I consider myself fortunate as the topic of peritoneal surface malignancies is very attractive and people, both from clinical and biological grounds, usually work on it in a passionate manner. We have been working in this fashion in the last 20 years and consequently in our institution the multidisciplinary collaboration is well consolidated.

**Q: From your extensive experience, how would you evaluate the quality of surgeon-patient communication? How are patient groups/representatives involved in the clinical decisions made by your team?**

Yes, we believe in patients groups/associations that can improve the management. We observe with interest the efforts of different patients' association present in US and England and we also in Italy there is an embryonal patient association in the field of PSO.

In the meantime, despite the complexity of the issue, thanks to the availability of information on internet, patients usually come to our evaluation half informed about their situation. The indication of the treatment usually requires a series of preoperative workup that takes some days to be completed and we maintain an intense discussion with the patient and his family, clearing all aspects of the treatment.

**Q: Do you think the perspective of patients can contribute to improve the quality of the current oncologic surgery procedures?**

Yes, the wellbeing of the patients is our final goal, so is fundamental to receive feed backs from them to tune our decision-making process with their wills.

**Q: What do you think is the major strength of ESSO as a society?**

ESSO major strength in my opinion is represented by the educational program promoted through the Core Curriculum and managed by the Educational and Training Committee. One more ESSO positive characteristic is the investment on the young generation of surgeons.

**Q: What could ESSO do to push for an increase in the amount and quality of surgical oncology research in Europe?**

Intensify the current educational policy and European networks.