



Hyperthermic intraperitoneal chemotherapy in epithelial ovarian cancer: current evidence-based indications

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Biography: Rene Pareja is a gynecologist-oncologist at Astorga Oncology Clinic in Medellín and the National Cancer Institute in Bogotá, Colombia. Dr. Pareja is a reviewer for more than 20 specialty journals, an Associate Editor for IJGC, and a member of the board of directors of the International Gynecological Cancer Society (IGCS). He is the author of nine book chapters and more than 70 publications in peer-reviewed journals, and at IGCS 2021 he received an award for Community Advancement in Resource-Limited Settings.

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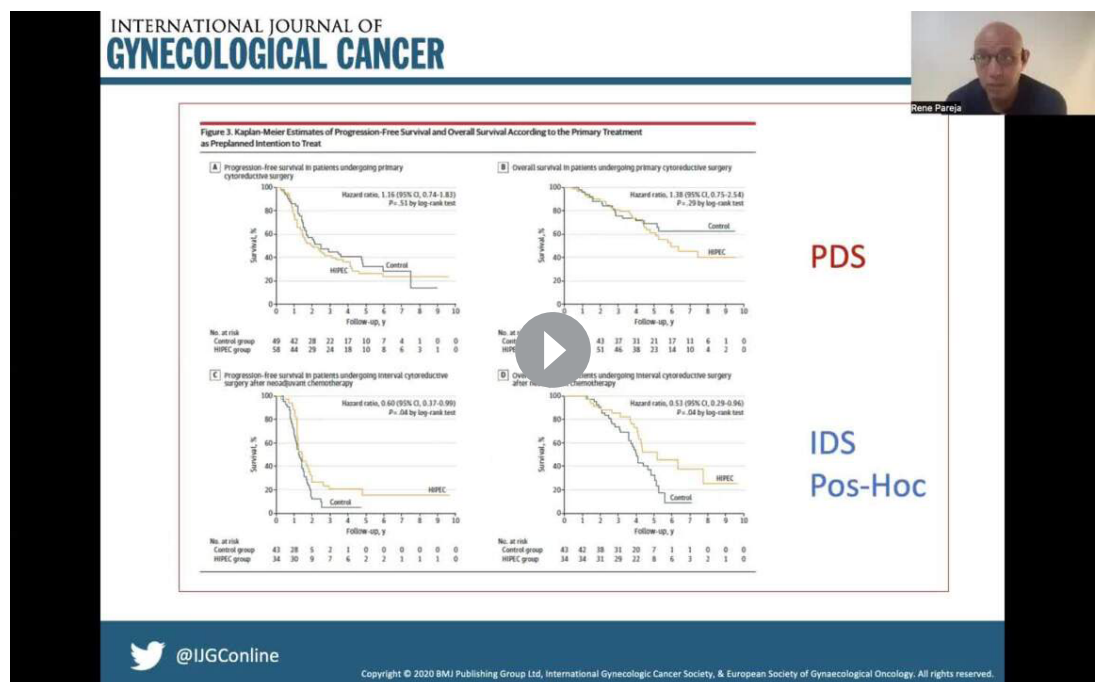
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Unfortunately, epithelial ovarian cancer is diagnosed in 80% of cases as locally advanced disease, with intra-peritoneal spread, ascites, and multiorgan involvement. This is challenging for all the members of the therapeutic team, who must decide what should be the goal for surgical treatment in order to achieve a R0 resection. During the last 20 years, hyperthermic intraperitoneal chemotherapy has emerged as a promising alternative, in facing this difficult disease. There is a steadily increasing number of publications on this issue, most of them retrospective, addressing

the problem in different clinical scenarios: after primary debulking surgery, after neoadjuvant chemotherapy, relapse disease, and combinations of the aforementioned settings.^{1,2}

Three prospective randomized trials have been published, the most relevant that by van Driel and her group in 2018,³ including patients undergoing interval debulking surgery; another from the Memorial Sloan Kettering cancer center, published by Zivanovic et al,⁴ which included patients undergoing secondary cytoreduction after a platinum-sensitive relapse,



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Video 1 Hyperthermic intraperitoneal chemotherapy in epithelial ovarian cancer: current evidence based indications. IDS, interval debulking surgery; PDS, primary debulking surgery.



RATIONALE FOR HIPEC

1. Targets peritoneal disease
2. No barriers of postoperative adhesions
3. No interval between CRS and chemotherapy (intraoperative)
4. Higher concentration of chemotherapy at disease site
5. Limits systemic toxicity
6. Hyperthermia enhances effect of chemotherapeutic agents by increasing tumor penetration and DNA-crosslinking
7. Survival benefit in favor of post-surgical IP regimens



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Figure 1 Rationale for hyperthermic intraperitoneal chemotherapy. CRS, cytoreductive surgery.

assessing the oncological benefit of adding hyperthermic intraperitoneal chemotherapy as part of treatment; and the third, from Korea,⁵ which included primary and interval debulking surgery, addressing the oncological outcome. This educational video lecture aims to update available information on hyperthermic intraperitoneal chemotherapy and its current role in locally advanced epithelial ovarian cancer (Video 1, Figure 1).

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