Magdalena Esteban

Medical Doctor | Medical Nutrition Specialist
Email: Medinamagdalena871@gmail.com | Phone (preferred): +5493512250060 | Phone (alternative): +543514671843
Address: Carifeo 3576, Córdoba, Argentina
ID: 37822434
Date and Place of Birth: Sept 2nd, 1993. Cordoba, Argentina

Personal Summary
I am a positive and enthusiastic person who enjoys spreading energy and passion. I thrive on creativity and innovation, always seeking new experiences and learning opportunities to reinvent myself. I embrace challenges and believe in the importance of learning from what has not yet been tried.

Education

Medical Doctor
National University of Cordoba, School of Medicine, Graduated February 2018.

Postgraduate Education

- **Postgraduate Diploma in Medical Nutrition** – Medical Council of the Province of Cordoba, Passed in December 2020
- **Master in Aesthetic Medicine** – Association of Reconstructive & Aesthetic Clinic, Cordoba, Final Exam Passed in 2019
- **Rotation in Plastic Surgery Area** – Dr. Cohen Clinic, Madrid, Spain, 2020
- **Master in Rhinoplasty and Otoplasty with Dermal Lifting Threads** – Tbilisi, Georgia, 2021
- **Master in Full Face Method with Dermal Lifting Threads** – Tbilisi, Georgia, 2021
- **Master in Dermal Lifting Threads in Gynecology** – Tbilisi, Georgia, 2021
- **Rotation in Aesthetic and Reconstructive Plastic Surgery** – Cobellis Clinic, Naples, Italy, 2021
- **Rotation in Hair Transplant Clinic** – Istanbul Esthetic Center, Istanbul, Turkey, 2021
- **Assistant at Aesthetic Medicine World Congress (AMWC)** – Monaco, 2021
- **Master's in Naturopathy** – Spanish Society of Training, 300 hours, Final Exam Passed in 2023
- **Master in Herbal Dietetics** – Spanish Society of Training, 300 hours, Final Exam Passed in 2023

Undergraduate Training

- **Rotation in the University of Colorado Anschutz Medical Campus** – Denver, US, May–December 2015. Internship in Medical Oncology, Final Project on Testicular Tumors. Letter of Recommendation Attached.
- **On-Call Internship** – Santísima Trinidad Children Hospital, Cordoba, Argentina, June–December 2016. Speciality in Traumatology, April–July 2017.
- **On-Call Internship** – Santísima Trinidad Children Hospital, Cordoba, Argentina, June–December 2016. Speciality in Ophthalmology, April–July 2017.
- **Laboratory Research in Histology** – Research on Stem Cells, Reference: Dr. Avila, phone: +0351155105201.
- **Attendance at "2015 Scientific Neuroscience Conference"** – Group project on Neuro-imaging, Supervisor: Dr. Foa Torres. School of Medicine, National University of Cordoba, Argentina.
- **Attendance at "Medical Clinic Congress"** – Sheraton Hotel, Cordoba, Argentina, June 2014.
- **Student Assistant in 'Medical Informatics'** – Research, School of Medicine, National University of Cordoba, March–December 2013. Teaching under Dr. Hugo Juri.

Work Experience

- **March-April 2017** – On-call Main Physician, Hospital Italiano, Cordoba, Argentina.
- **July 2017–March 2018** – Floor and Therapy Supervisor, Savio Privada SA Clinic, Rio Tercero, Argentina.
- **July 2017–March 2018** – On-call Floor Physician in Intensive Care Unit, Savio Privada SA Clinic, Rio Tercero, Argentina.
- **March 2018–February 2020** – Columnist for "Despertate" TV show on Medical Nutrition and Aesthetic Medicine.
- **December 2018–February 2020** – Floor Supervisor and Nutrition Area In-Charge, Haemodialysis Services, Caroya Sanatorium, Colonia Caroya, Argentina.
- **April–December 2018** – Floor Supervisor, Clínica Privada de la Ciudad SRL, Hospital Italiano, Villa Allende, Cordoba, Argentina.
- **April–December 2018** – Aesthetic Doctor, Medical Office: Cristina Aruba, Cordoba, Argentina.
- **April 2019–December 2020** – Aesthetic Doctor, Medical Office: Femmes Aesthetics and Cosmetology, Phone: +0351153446555
- **December 2020–December 2021** – Aesthetics and Nutrition Doctor, Lab Vanitas, Madrid, Spain, Phone: +34663416340
- **June 2020–December 2020** – Nutrition and Aesthetic Medicine, Own Practice, Mariano Fragueiro 1469, Cordoba, Argentina.
- **April–June 2020** – Aesthetic Medicine, Doctor in Different Techniques, Lola Hair Medical Office, Cordoba, Argentina.
- **February 2021–February 2023** – Aesthetic Doctor: Mini Liposuction, Lipotransfer, Rhinomodeling, Thread Lifting, Avalon-Ibiza Clinic, Spain.
- **November 2021–March 2022** – Aesthetic Procedures Doctor, Lola Sopeña Clinic, Madrid, Spain, Phone: +34917527719

- **April–December 2021** – Nutrition and Aesthetic Medicine Doctor, Vieco Clinic, Madrid, Spain, Phone: +34653727272
- **September 2022** – Mini Liposuction and Aesthetic Medicine Doctor, Morocco.
- **May 2022–March 2023** – Aesthetic Procedures and Nutrition Doctor, Tiempo para ti Clinic, Bilbao, Spain, Phone: +34610706258
- **February 2022–February 2023** – Aesthetic Procedures Doctor, Yolanda Delgado Clinic, Madrid, Spain, Phone: +34917507534
- **March 2024** – Main On-call Physician, Mayo Sanatorium, Cordoba, Argentina.
- **April 2024** – Floor Supervisor, Velez Sarsfield Oeste Private Clinic, Cordoba, Argentina.

Teaching Experience

- **November 2021–February 2023** – Conducting Training for Doctors on Various Hyaluronic Acid Techniques, Sellaesthetic. Reference: Mercedes Navarro, Phone: +34657091874.
- **February 2021–February 2023** – Conducting Training on Rhinomodelation and Aesthetic Medicine, Formacurae, Valencia, Spain. Phone: +34961935144.
- **June 2022** – Conducting Training on Rhinomodelation, Botox, and Hyaluronic Acid, “Fundación Cordoba Sonrie”, Movenpick Marrakech, Morocco.

University of Colorado
Anschutz Medical Campus

School of Medicine
Department of Medicine
Division of Medical Oncology

April 27, 2017

To whom it may concern,

It is with great pleasure that I write you this letter for Ms. Magdalena Medina, who has been a visiting student in the Division of Medical Oncology Breast Clinic for the last 6 weeks.
I am Professor of Medicine in the University of Colorado and Division of Medical Oncology of the University Hospital.
Ms. Medina is a bright student of Medicine in the School of Medicine of the Universidad Nacional de Cordoba in Cordoba, Argentina. She is expecting graduation at the end of 2017.
I was impressed by Ms. Medina's commitment to excellence, including significant research experience. She has attended the Breast Clinic and seen 10 patients per day under my supervision. She is a superb communicator. She has superb patient skills. She learns rapidly and has insightful questions.
She is planning to pursue residency in Internal Medicine and likely fellowship in Medical Oncology. Given her excellent skills and commitment, she is highly qualified for that. I give her my highest recommendation
If you have any further questions or if further information is needed, please feel free to contact me at the address or phone number listed.

Sincerely,

Jose Mayordomo MD PhD
Professor of Medicine
University of Colorado Hospital
Division of Medical Oncology
Dianne O'Connor Thompson Breast Center
Mail Stop F724. Anschutz Outpatient Pavilion
1635 Aurora Court
Aurora CO 80045
Phone: 720-8488032
Fax: 720-848-1774
Email: jose.mayordomo@ucdenver.edu

"Embryoid Bodies in Testicular Germ Cell Tumors"

4th Annual Pathology Poster Session
March 24, 2017

Lian Zhang[1], Kaleigh Lindholm[1], Magdalena Esteban[2] and Francisco G. La Rosa[1]

[1]University of Colorado Anschutz Medical Campus, Department of Pathology, Aurora CO 80045 and [2]Universidad Nacional de Córdoba, Facultad de Ciencias Médicas, Córdoba, Argentina

INTRODUCTION

A rare form of mixed germ cell tumor seen in both male and female gonads is the polyembryoma. It is perhaps the most photogenic of all gonadal germ cell tumors and is also intriguing because of its distinctive, organized arrangement of yolk sac tumor and embryonal carcinoma elements and recapitulation of very early embryonic development, even to the extent of having in its fundamental unit, the **embryoid body**, a miniature yolk sac with an amniotic cavity. These tumors, which are constituted by innumerable embryoid bodies, almost always contain teratomatous components in different amounts, and one way of viewing the polyembryoma is to consider it the most immature form of teratoma. **Embryoid bodies** are relatively common as a minor component of many mixed germ cell tumors, particularly in the testis, and the diffuse embryoma is another variant that has a particular arrangement of yolk sac tumor and embryonal carcinoma elements.

The **embryoid body** are usually observed isolated or admixed with embryonal components of germ cell tumors and mature or immature teratoma elements [1].

Embryoid bodies, show two layers resembling "ectoderm" and "endoderm". These layers are in contrast with a normal embryo in which immature and/or mature structures are derived from the embryonic disc. The structure resembling "amniotic cavity" is frequently connected with yolk sac. Embryoid bodies may be considered to be the product of a divergent differentiation into intestine and liver from the plastic epithelium, which seems to be derived from an embryonic gut.

CASE DESCRIPTION

A 19 year old male presented with left lower quadrant pain, scrotal pain and swelling for one day. He also had one episode of vomiting. He referred no fever/ chills/ night sweats. He denied trauma, dysuria, hematuria, or urethral discharge. He had a past surgery history of left orchiopexy for undescended testicle as infant. Physical examination revealed an enlarged left testicle with largest dimension of up to 10-12 cm. The testicle was firm, immobile, without overlying skin changes of the scrotum. Ultrasound examination showed a 10.46 x 4.83 x 5.47 cm complex mass within the testicle, with solid and cystic components, as well as areas of calcifications. The laboratory studies showed elevated beta-HCG at 2722 mIU/mL and elevated AFP at 3073 ng/mL. The LDH was within normal limit (268 U/L). A left radical orchiectomy was performed.

PATHOLOGIC FINDINGS

Gross examination of the testicle revealed two separate encapsulated nodules, measuring 6.3 cm and 5.0 cm respectively. Upon sectioning, the tumor showed a variegated lobulated architecture with heterogeneous texture, and tan-white granular and hemorrhagic cystic areas.

Microscopic examination revealed about 60% of the tumor to be mature teratoma (Figure 1A), and about 5% of tumor to be yolk sac tumor. Interestingly, a significant portion of the tumor (~35%) also showed features of polyembryoma with increased number of embryoid bodies embedded in a myxoid background. Areas with features of diffuse embryoma, characterized by embryonal carcinoma and yolk sac tumor cells arranged in parallel cords and ribbons, were also present (Figure 1B). Continued . . .

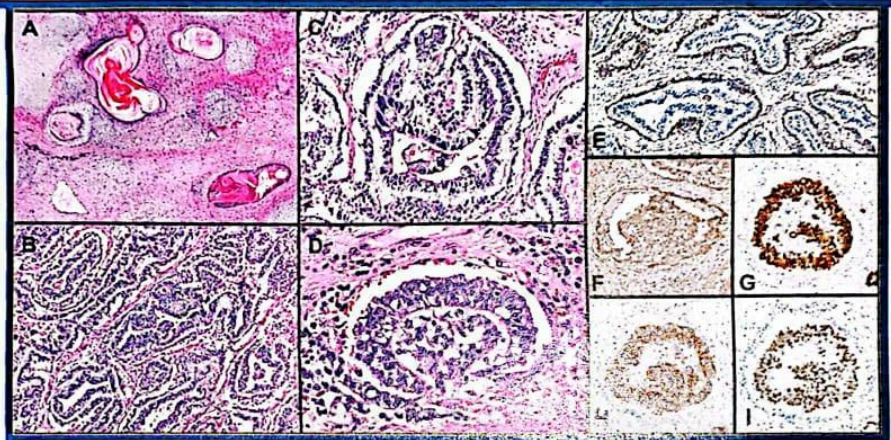

Figure 1. (A) Area with mature teratoma (H&E, 4 x); (B) Area of yolk sac tumor with endodermal pattern (H&E, 10 x); (C) Embryoid bodies (H&E, 40x); Embryoid body outer layer staining for pan-cytokeratin (E) and alpha fetoprotein (F) (40x); Embryoid body inner layer cells staining for OCT3/4 (G) and CD30 (H), and nuclear staining for SOX-2 (I) (40x)

PATHOLOGIC FINDINGS . . . (continued)

On higher power, the embryoid bodies were composed of a central germ cell disc and two cavities, an outer one, mimicking amniotic cavity, and an inner one, mimicking yolk sac cavity (Figures 1C and 1D). Immunohistochemical studies showed that the outer layer of the embryoid bodies were positive for cytoplasmic pan-cytokeratin (Figure 1E) and Glypican 3, and the external border of this layer was positive for alpha-fetoprotein (α-FP) (Figure 1F), consistent with yolk sac tumor component; the inner layer of the embryoid bodies were positive for cytoplasmic OCT3/4 (Figure 1G) and CD30 (Figure 1H) and nuclear staining for SOX-2 (Figure 1I). B-HCG was also focally positive in the embryoid bodies (not shown). No evidence of lymphovascular invasion was observed. The final stage was ASCP stage IA (pT1, S2, Nx, Mx)

DISCUSSION

Diverse histologic patterns and biologic behaviors in different patient populations, male mixed germ cell tumors (MGCT) are very intriguing and a diagnostic challenge for oncologists and pathologists. We report an interesting case of a MGCT in a 19 year old male with a significant component of embryoid bodies. MGCT are common in the testis (~33%), and demonstrate an admixture of various histologic elements. Polyembryoma is a unique form of MGCT characterized by the presence of embryo-like structures (referred as embryoid bodies), composed of primitive embryonic components. Similar structures have been described in experimental models prepared from human embryonic stem cells (Figure 2) [9].

Continued ...

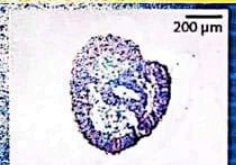

Figure 2. Embryoid body from in vitro culture [9]

Table 1 Relative proportions of histologic types of germ cell tumors in the ovary and testis

Histologic type	*Proportion in the ovary (%)*	*Proportion in the testis (%)*
Teratoma*	95	4
Dysgerminoma/ seminoma*	2	50
Yolk sac tumor*	1	1
Embryonal carcinoma*	0.2	10
Choriocarcinoma*	< 0.1	0.3
Polyembryoma*	< 0.1	< 1
Mixed germ cell tumor	< 1	33

*These figures refer to tumors of pure histologic type.

Taken from reference [3]

DISCUSSION . . . (continued)

The term of polyembryoma (pure form) is particularly designated to tumors with greater than 90% of embryoid bodies. Although pure form of polyembryoma is rare (<1% in testis, and <0.1% in ovary) (Table 1) [3], small component of embryoid bodies are not uncommonly seen in testicular MGCT. Here, we show a significant component of embryoid bodies (~35% of the tumor) with ribbon like arrangement of yolk sac tumor and embryonal carcinoma (Figure 1B). Morphologically, the embryoid bodies contain a central germ disc, an outer cavity recapitulating the amniotic cavity, and an inner cavity recapitulation the yolk sac cavity (Figures 1C and 1D). The yolk sac cavity is separated from the central germ disc by a thin layer of yolk sac epithelium, as shown by α-FP staining in Figure 1F. Additional immunohistochemistry studies clearly outlined the yolk sac tumor (Figures 1E, and 1F) and embryonal carcinoma (Figures 1G, 1H, and 1I) components of embryoid bodies.

These immunohistochemistry staining patterns confirmed the presence of classic embryoid bodies. A few similar cases have been reported [7], but due to the rarity of these tumors and the variable percentages of each of the MGCT components, their prognostic significance is difficult to determine.

REFERENCES

1. Nakashima N, Murakami S, Fukatsu T, Nagasaka T, Sukata S, Ohiwa N, Nara Y, Sobue M, Takeuchi T. Characteristics of "Embryoid Body" in Human Gonadal Germ Cell Tumors. Human Pathology (1988) 19:10 1144-1154
2. Dewan Khushboo, Choudhury Monisha, Pathania Om Prakash, Singh Smita. Primitive neuroectodermal tumor in a mixed germ cell tumor - A rare case report. Clin. Can. Invest. J. 2015, 4:1, 66-69
3. Ulbright TM. Germ cell tumors of the gonads: a selective review emphasizing problems in differential diagnosis, newly appreciated, and controversial issues. Modern Pathology (2005) 18, S61–S79
4. Cheng L, Zhang S, Talerman A, Roth L M. Morphologic, immunohistochemical, and fluorescence in situ hybridization study of ovarian embryonal carcinoma with comparison to solid variant of yolk sac tumor and immature teratoma. Human Pathology (2010) 41, 716–723
5. Takemon M, Nishimura R,Yamasaki M,Kawabe Y,Hasegawa Y. Case Report: Ovarian Mixed Germ Cell Tumor Composed of Polyembryoma and Immature Teratoma. Gyn. Onc. 1998, 69, 260–263
6. Pierce GB, Dixon FJ, Verney EL. Teratocarcinogenic and tissue-forming potentials of the cell types comprising neoplastic embryoid bodies. Lab. Invest. 583-602
7. Dewan K, Choudhury M, Pathania OP, Singh S. Primitive neuroectodermal tumor in a mixed germ cell tumor - A rare case report. Middle-Eastern Association for Cancer Research Clinical Cancer Investigation Journal Year, 2015 14 :1; 66–69
8. Beck SJ, Fulmer HF, Lee T. Solid malignant ovarian teratoma with "Embryoid Bodies" and trophoblastic differentiation. Department of Pathology, University of Aberdeen, and Departments of Pathology and Obstetrics, Saint Agnes Hospital, Fresno, California, USA. Received Apr. 1969; accepted22 May 1969.67 -73
9. Gerami-Naini B, Dovzhenko OV, Durning M, Wegner FH, Thomson JA, Golos TG. Trophoblast differentiation in embryoid bodies derived from human embryonic stem cells. Endocrinology, 2004. 145(4):1517-24.
10. Kurman RJ, Norris HJ. Embryonal carcinoma of the ovary: a clinico-pathologic entity distinct from endodermal sinus tumor resembling embryonal carcinoma of the adult testis. Cancer 1976;38:2420–2433.