

E. PANAGIOTOPOULOS AND D. VALTIS: PERITONEAL DIALYSIS PIONEERS IN LATE 1940'S GREECE

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Introduction and Aims

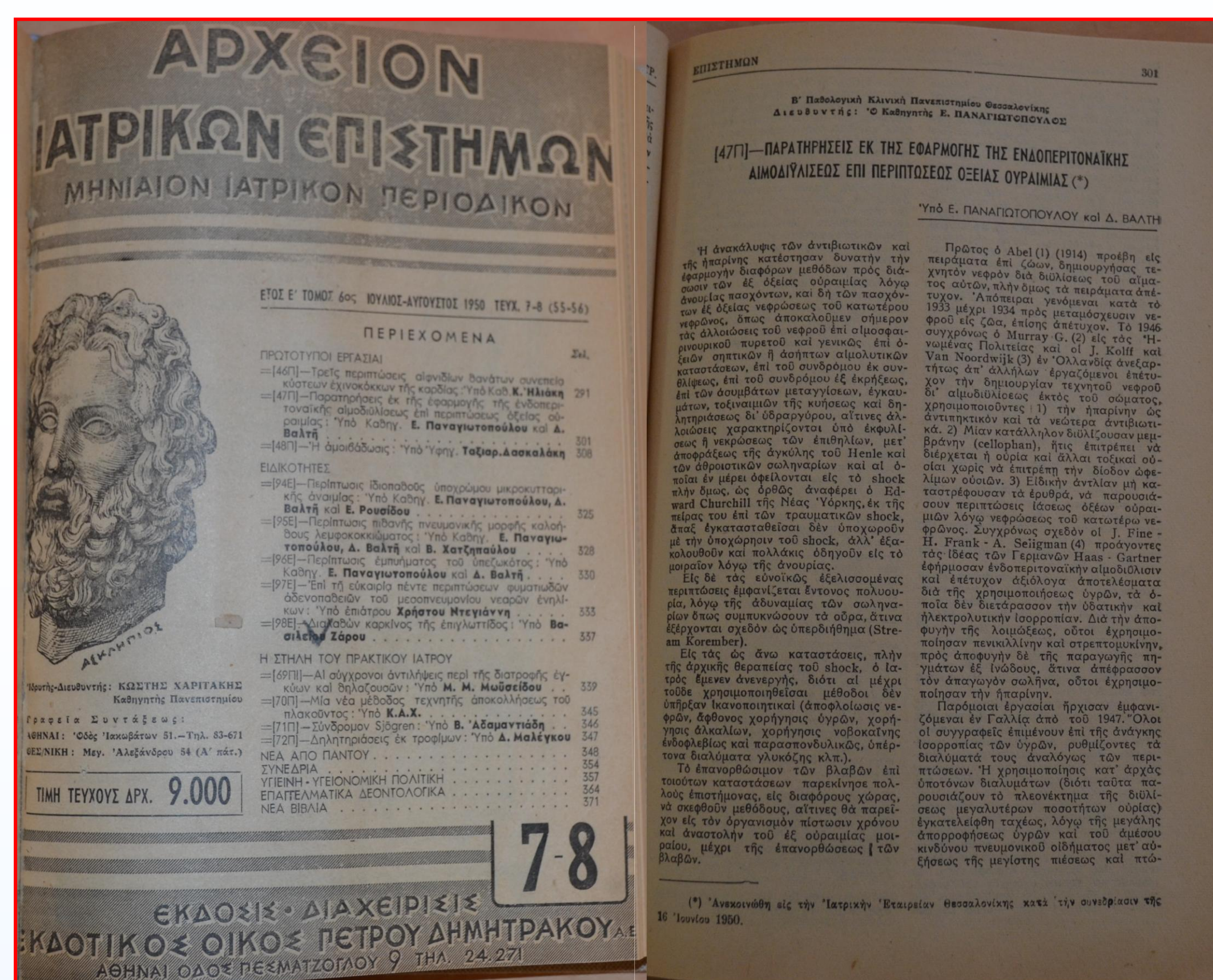
Technical problems regarding collodion membranes fragility hindered early hemodialysis research at the start of the 20th century. This led to search for alternative membranes and G. Ganter was the first to report the use of peritoneal membrane *in situ* for dialysis of uremic patients (1923), followed by S. Rosenak (1934). In the years after World War II, peritoneal dialysis for treatment of potentially reversible acute kidney injury attracted the interest of many researchers.

Methods

We searched through medical textbooks, conference proceedings, journal article databases and Internet search engines for references reporting the beginnings of peritoneal dialysis in Greece.

Results

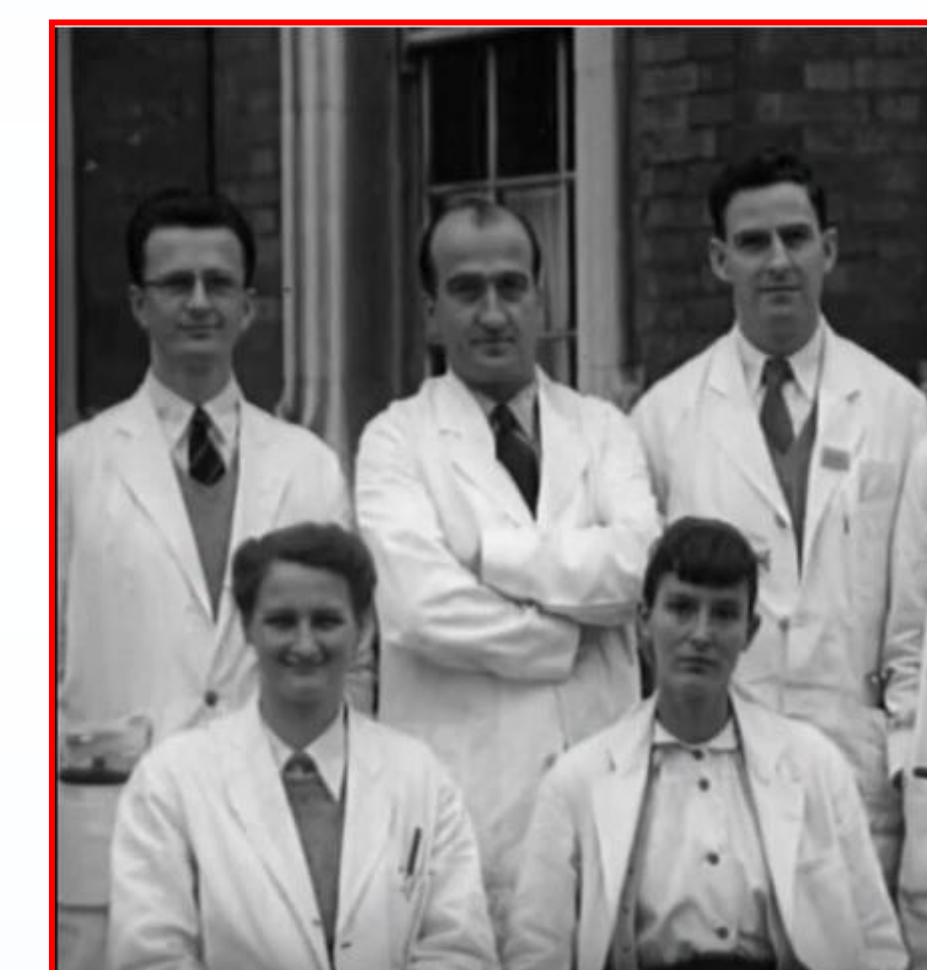
Eftymios Panagiotopoulos (1904-73) and Dimitrios Valtis (1917-73) published in 1950 the first attempt of peritoneal dialysis at Hippokrateion Hospital of Thessaloniki, Greece in the paper entitled "Observations from the implementation of intraperitoneal dialysis in a case of acute uremia" (originally in greek). In the introduction, they acknowledged contemporary work by the groups of J.Fine in USA and M. Dérot in France on peritoneal dialysis. The authors described the case of a 25-year-old female who developed acute kidney injury with complete anuria, jaundice, hemolytic anemia and thrombocytopenia following septic abortion induced by apiole, a commonly used abortifacient of the time. Two weeks after disease onset, they performed two peritoneal dialysis sessions 48 hours apart, during which they continuously instilled 10 liters of dialysis solution inside the peritoneal cavity over 12 hours yielding 12 liters of drainage fluid. A third session was stopped due to outflow tube obstruction. Although plasma urea concentration halved after treatment and transient clinical improvement was noted, flow problems due to lack of heparin made them discontinue treatment and the patient deceased soon afterwards.



The original publication in the medical journal "Αρχείον Ιατρικών Επιστημών" (english: Archive of Medical Sciences).



E. Panagiotopoulos at a young age.



D. Valtis (in the middle, standing) during his fellowship in Glasgow (1951-5).



D. Valtis and E. Panagiotopoulos at a later age.

Conclusions

The two physicians maintained a lifelong interest in renal medicine. D. Valtis was also amongst the first to introduce hemodialysis in Greece and a founding member of the Greek Society of Nephrology. In a country devastated by the destructive consequences of Nazi Occupation (1941-44) and a bloody Civil War (1946-49), Greek doctors strived to keep abreast of novel research developments and offer their patients up to date medical care under extremely harsh conditions.

References

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3. J.S. Cameron. A history of the treatment of renal failure by dialysis. Oxford: OUP, 2002.
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