

## **Title: POTTER: Oesophageal Fistulae In Catheter Ablation Patients**

**Participants: Roland Tilz**

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### **Dr Roland Tilz**

"- Welcome, my name is Professor Roland Tilz. I'm the Director of the Department of Rythmology at the University Hospital in Lubeck. I'm glad to present the results of the International POTTER AF Study.

#### Rationale

The rationale behind this international registry was to evaluate the incidence, the management, and the outcome of atrial oesophageal fistula formation post AF ablation. Oesophageal fistula formation is a very rare but highly lethal complication following AF ablation.

#### Patient Population and Registry Design

It is an international retrospective survey. In total, more than 200 centres participated in this study from 35 countries worldwide, so it's a true worldwide survey. In total, 138 patients were enrolled in this study. In this survey, more than half a million of patients were treated in more than 200 institutions out of 35 countries. Out of this more than half a million patients, 138 patients had an oesophageal fistula formation.

#### Key Findings

The key finding of these study were the following. Number one, the incidence of esophageal fistula formation post AF ablation is 0.025%. This means 25 out of a hundred thousand patients get an oesophageal fistula. It appears to be a pure RF problem, because 38 out of a hundred thousand patients treated with RF got an oesophageal fistula formation, whereas only 15 out of a million patients treated with cryoablation suffered from an atrial oesophageal fistula. Second, it is very important that you look for these complications and treat them aggressively. You can diagnose the

fistula with a CT in over 80% of patients. If you do not treat the patients, the mortality is 80%. If you do not treat the patients, so if you treat them conservatively, the mortality rate is almost 90%. Whereas if you treat the fistula either with surgery or with stenting, their mortality rate is just about 50%. Third, you have to be aware of the complications. If you find it, treat it early. And number four, maybe RF energy is not the right energy to treat patients, because it appears to be a pure RF problem. Cryo energy and pulsed-field ablation energy appear to be much safer with regards to oesophageal fistula formation.

### Impact on Practice

So these findings have a huge implication on my daily practice. Number one, awareness is very important, so we have to be aware of this complication. And once the patient is complaining of dysphagia, fever, neurological deficit, after AF ablation you have to do a CT scan to look whether the patient has any evidence of oesophageal injury. Second, you have to treat it aggressively, because if you do wait and treat it conservatively the mortality rate is more than 90%. Treat it early. Third, reconsider your energy of choice. This appears to be a pure RF problem. So other energy sources like cryo, or pulsed field ablation are associated with a much lower incidence.