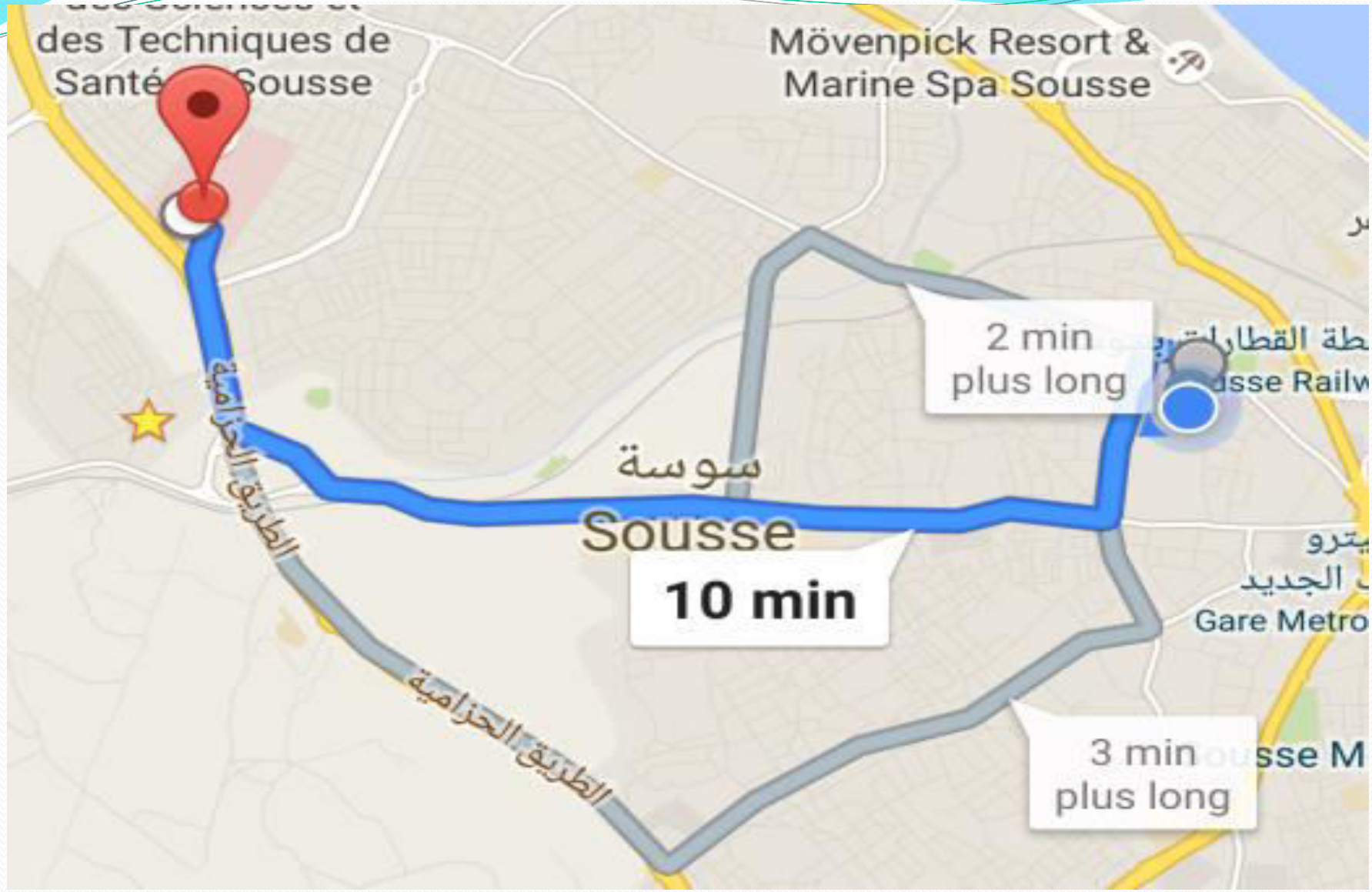
EXTRACORPOREAL MEMBRANE OXYGENATION : A FIRST EXPERIENCE IN A TUNISIAN MEDICAL INTENSIVE CARE UNIT

INTRODUCTION

- ECMO is a Complex critical care therapy used to provide cardiac or respiratory support in severely ill patients
- This technique is mostly indicated in refractory cardiogenic shock and is considered as an alternative to conventional therapy for adults with ARDS.
- Even when not possible at bedside patient should be transferred in a specialized center which is not usually easy because of instability.
- Aim : To assess feasibility and safety of transportable ECMO implantation offered by a specialized surgical cardiovascular center.

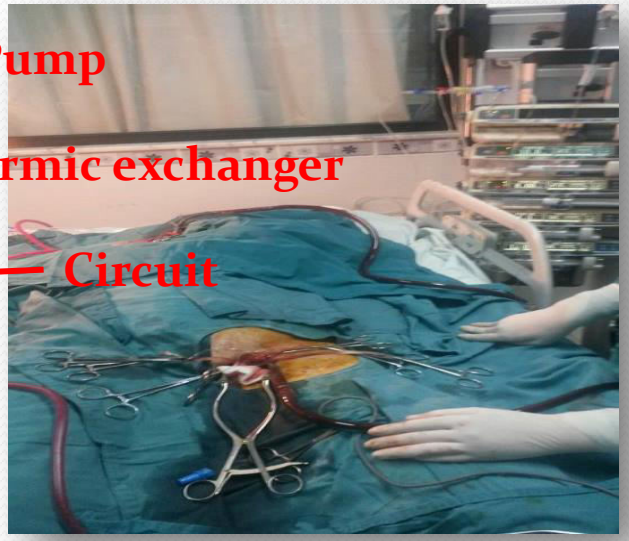

des Techniques de
Mövenpick Resort &
Marine Spa Sousse
2 min
plus long
سوسة
Sousse
10 min
الطريق الحزامية
الطريق الحزامية
3 min
plus long
Gare Metro

Oxygenator

Pump

Thermic exchanger

Circuit



	Case 1	Case 2	Case 3
Age(yrs)	37	41	24
Gender	M	F	M
Initial diagnosis	Acute myocarditis cardiogenic shock	Influenza A (H1N1) ARDS	Alveolar hemorrhage
SAPSII/SOFA	48/12	29/8	44/6
Epinephrine (µg/kg/min)	0.8	0	0
Norepinephrine (µg/kg/min)	2	2	0
PaO2/FiO2	55	57	58
Serum Creatinin(µmol/L)	233	66	217
ECMO implantation delay (dys)	0	20	8
Time from indication to arrival(h)	**7**	**8**	**12**
Time for ECMO implantation (mn)	**90**	**120**	**180**
ECMO type	Veno-arterial	Veno-venous	Veno-venous
ECMO technique	Surgical at bedside	Surgical at bedside	Surgical at bedside
ECMO duration (dys)	4	5	5
Complications	0	0	Minor bleeding
Issue	Death	Death	Death

DISCUSSION

- The present study, demonstrates that ECMO offered by a reference unit is largely feasible and safe.
- Delays from call to ECMO implantation were relatively long, these could not be shortened in these first three cases.
- Huge efforts have to be made in order to lessen those delays.
- According to well trained mobile ECMO teams in Italy, the maximal time between getting called and actually posing ECMO in other institutions should not exceed 90min (7h in the present study), for distances going from 1 to 230km (5km in the present study).
- These teams are on a call 24/7, able to leave with the necessary equipement in 20 minutes.

THANK YOU