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Electrical alternans

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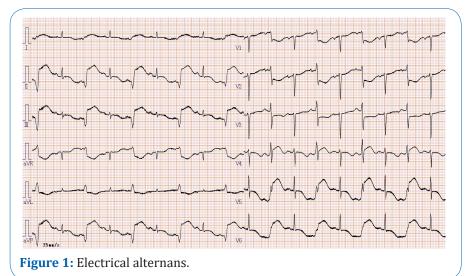
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Description

A 71-year-old woman presented with a two-month history of anorexia. Her medical history was notable for Mucosa-Associated Lymphoid Tissue lymphoma (MALToma) of the stomach and hemodialysis. Laboratory tests revealed electrolyte imbalances such as low levels of potassium, calcium, phosphorus, and magnesium. Gradual improvement was attempted to avoid refeeding syndrome, but ventricular fibrillation developed during routine hemodialysis and was immediately treated with electronic defibrillation. Later, a diagnosis of takotsubo cardiomyopathy and central pontine myelination was added. Follow-up electrocardiography showed a QTc interval of 633 ms and electrical alternans of the QRS complexes and T waves (Figure 1). Electrical alternans is a rare phenomenon and special attention should be paid when electrical alternans includes T-wave alternans, a finding indicative of severe electrical instability [1,2]. In our case, careful control of electrolytes and continuous administration of intravenous lidocaine prevented the recurrence of fatal arrhythmias, although nonsustained ventricular tachycardia was often seen on the monitor.



References

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