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## P130

**Clinical profile and management of diabetic ketoacidosis in a Tunisian pediatric unit**

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**Objective:** Analyze the clinical characteristics, the therapeutic management and the evolution of patients with ketoacidosis admitted to a general pediatric department in a developing country.

**Methods:** A descriptive retrospective study carried out on type 1 diabetic patients admitted for inaugural ketoacidosis or not, during the period from January 2018 to December 2021, in the pediatric department of Habib Bougatfa hospital in Bizerte-Tunisia.

**Results:** We collected 30 children, were hospitalized for ketoacidosis during the study period. There were 21 girls and 9 boys. The average age is 8 years with extremes between 1 year and 14 years. 34 events of ketoacidosis were studied. 23 of them revealed diabetes. Ketoacidosis occurs in already diagnosed diabetes patients was due to diet deviation in half of the patients. Among the 34 cases 11 were severe. Hypovolemic shock was noticed in 7 cases. Metabolic abnormalities including hypokalemia and hyponatremia were noted in 16 and 2 cases respectively. One patient had renal failure and another had cerebral edema. Delay for therapeutic care, between the appearance of the first signs and the therapeutic care, was between 24 h–48 h in 56% of cases. All patients were treated according to the ISPAD 2018 recommendation. The evolution was favorable in the majority of cases with 26 hours as an average duration of the protocol. The average hospital stay was 9 days. No episode of death was recorded.

**Conclusions:** Diabetic ketoacidosis is a crucial pediatric medical emergency. In our study we noticed a long delay between the appearance of the first signs and the therapeutic care. This indicates the importance of diabetic patients' education as well as the general population.

**Reference**

Wolfsdorf JJ, Glaser N, Agus M, Fritsch M, Hanas R, Rewers A, et al. ISPAD Clinical Practice Consensus Guidelines 2018. *Pediatr Diabetes* (2018) 19 Suppl 27:155–77.

## P131

**Cardiac arrest in Covid-19: CPR in times of covid**

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When CPR is performed immediately before the arrival of the ambulance, the chances of survival are three times higher. However, the laity are historically afraid when it comes to resuscitation maneuvers. With the advent of social media-related misinformation, the fear of contracting COVID-19 also affected emergency situations that require immediate interventions from bystanders, such as cardiac arrest. The dangerous combination of fear and misinformation could decrease the willingness to provide help to someone who suddenly collapses in a public place and further decrease the rate of CPR initiated by bystanders (2). These considerations have suddenly become more relevant to all of us as the COVID-19 pandemic. (1) Performing cardiac massage only with compressions could lessen the fear of performing RPC in time of covid-19.

**Material and Methods:** All participants received pre-training with the resuscitation bracelet to perform CPR on a mannequin equipped

with a potentiometer to measure chest depth and compression rate in real time. We compared the result of those massages with and without feedback from the bracelet while we measured all the data with the portable device with potentiometer to evaluate the accuracy of the mathematical model'

**Results:** We recruited 7 participants, 5 men and 2 women. The ages between 25 and 40. The results were significant 45.11 + - 18.21 mm vs 51.045 + - 5.198 mm (p < 0.012) for massage depth and 87.855 + - 19.15 bpm vs 115.41 + - 6.15 bpm (p < 0.62) for frequency. Accuracy showed an RSME of 3.15 mm, a Pearson correlation coefficient of 0.94 (p < 0.94)

**Conclusions:** CPR devices improves survival

**Bibliography**

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## P132

**Activity of a paramedic emergency response team in the management of covid-19 patients in an emergency medical service**

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**Purpose of the study:** It's to study the activity of the paramedic emergency response team and the areas of action of this unit.

**Materials and methods:** It's a retrospective and descriptive study, over a period of 7 months, from January to July 2021, carried out in the military Emergency Medical Service (EMS). All interventions performed by the covid-19 paramedic unit were included in the study. We collected the epidemiological and clinical data of the paramedic outings.

**Results:** During the period of our study, the covid-19 paramedic unit carried out 222 outings for covid-19 patients (62% of EMS outings). The average age was 50 years old. The sex ratio was 1/3. The main reasons for phone calls were dyspnea in 72% of cases and fever in 12% of cases. The paramedic team took vital parameters in all patients. Therapy was instituted on medical prescription in 52% of cases. Oxygen therapy by face mask or nasal cannula was started in 41% of cases. Non-invasive positive pressure ventilation was used in 8% of cases. Evacuation to hospital was done in 66.5% of cases. An improvement in the condition of the patients during the transfer was noted in 78.3% of cases and a worsening in 8% of cases. No patient died during home follow-up or during transport.

**Conclusions:** The paramedic emergency response team has extended the area of intervention of the EMS. It thus plays an important role in pre-hospital transport in the covid-19 pandemic. The development of its activity has benefited from the evolution of telemedicine, so allowing the enlargement of its indications.

## P133

**Training with resuscitation bracelet for people over 60 years of age.g**

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Cardiac arrest in adulthood is very common and represents a serious public health problem in Western countries. The average age of