AV-block in patient with progressive muscle dystrophy – electrostimulation complications Case report

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We report a case of total AV-block and paralytic ileus in 30-year old patient diagnosed with progressive muscular dystrophy 21 years ago. 30-year old male, diagnosed with progressive muscular dystrophy in 1998, has been in a wheelchair since 2002. Spondylodesis of thoracic spine was performed in 2005 due to scoliosis. Since 2014, patient has been using non-invasive mechanic ventilation due to respiratory failure. On 19th of February patient is diagnosed with obstructive ileus. Before the planned laparotomy, a total AV-block was diagnosed. Patient was transferred to the coronary care unit for temporary wire placement under ultrasound guidance. During the wire placement patient went to asystole, short resuscitation was performed and percutaneous pacing was placed. Interestingly percutaneous pacing did not result with voluntary muscular contractions due to severe muscle dystrophy. At last, endocardial pacing was successful and patient underwent laparotomy. Paralytic ileus was diagnosed. Postoperatively endocardial pacing was lost, again resuscitation was required along with percutaneous pacing. Therefore permanent DDDR pacemaker was implanted. Before implantation, on fluoroscopy temporary wire was visualized deep in pulmonary artery branch with multiple loops in right ventricle. This case report highlights the importance of x-ray guided endocardial lead placement in which less complications occur (RV-perforation, heart tamponade and in our case non-capture). In our case muscle weakness, respiratory failure, paralytic ileus, AV-block and treatment difficulties are all consequences of patient’s muscle dystrophy. Knowing that, it must be emphasized that knowledge of pathology of progressive muscle weakness is critical in various fields of clinical medicine.