Background: Chronic total occlusions (CTOs) are considered as the most complex lesions to treat via percutaneous coronary intervention (PCI), due to the indications, costs and technical difficulties related to these procedures. As a consequence, only about 10% of all CAD patients, clinically eligible for CTOPCI, are currently being treated via PCI. The majority is treated either medically or via coronary artery bypass graft (CABG) surgery.

Aims of the study: estimate the value of application of J-CTO score as a model to stratify the complexity and predict expected success rates at Iraqi center for heart disease.

Patients and methods: One hundred patients with chronic total occlusion were enrolled in this study for the period October 2014 - May 2015 who were consecutively Iraqi center for heart disease. Data was collected on demographic, clinical and angiographic characteristics by experienced CTO operators. Descriptive analyses were performed using SPSS Statistics to assess the relationship between procedural success and any of the demographic, angiographic and/or clinical characteristics. The level of significance was set at 95% or higher.

Results: Sixty-one patients out of 100 patients (61%) had a successful
PCI.
Univariate analyses showed significant differences for gender and Electrocardiography with J-CTO score, and with success rate. Angiographically, a “blunt stump” (42 vs. 75%, p=0.001), “calcifications” (37 vs. 70%, p=0.003), “tortuosity” (21 vs. 67%, p=0.001), “CTO length” (44 vs. 84%, p=0.000) and a “re-attempt” (33 vs. 65%, p=0.036) all had a significant negative impact on procedural outcome.

Conclusion: The J-CTO score is a valuable tool for predicting technical outcome in patients with CTO undergoing PCI.