FACTORS ASSOCIATED WITH COMPLICATIONS DURING TRANSCATHETER CLOSURE OF PATENT DUCTUS ARTERIOSUS IN HASAN SADIKIN GENERAL HOSPITAL, BANDUNG, INDONESIA

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BACKGROUND
Patent ductus arteriosus (PDA) forms about 5-10% of congenital heart diseases (CHD). PDA was the first example of CHD to be treated by transcatheter closure, which becomes an established form of treatment for the majority of patients with PDA and as a safe alternative to surgery.

OBJECTIVE
This study is designed to determine factors that can predict the likelihood of incidence of all complications of transcatheter closure of PDA.

METHODS
This was a retrospective cohort study. Pediatric patients with PDA who had a successful transcatheter closure were studied. Transcatheter closure report found at Diagnostic Invasive Division, Hasan Sadikin General Hospital from January 2014 to May 2016 were collected (n=114). Reports with incomplete data were excluded from the study. Multivariable logistic regression was used to identify predictors of complications of transcatheter closure of PDA.

RESULTS
A total of 98 patients were enrolled in this study. There were 18 patients (18.4%) experienced complications of transcatheter procedure. Complications were seen more in those with type C defect (30.8%). The multivariate analysis shows that the size of ampulla and male gender were associated with incidence of complications of transcatheter closure of PDA (OR = 1.26; 95% CI: 1.01-1.56 and OR = 4.38; 95% CI: 1.32-14.45).
CONCLUSIONS
In our center, the size of ampulla and gender are independent risk factors for the incidence of complications of transcatheter closure of PDA.