Background.— In the context of new target therapies, this study aimed to assess the functional status and long-term outcomes of patients with Eisenmenger Syndrome reaching adulthood.

Patients and methods.— This is a single-centre retrospective review of all patients diagnosed with Eisenmenger Syndrome. Demographics, clinical data, underlying cardiac disease, functional status, therapeutics and outcomes were collected.

Results.— One hundred and fifty-nine patients were included (94 females: 59%), aged 27.7 ± 14.8 years at end-follow up, and 60 with Down syndrome (38%). Underlying cardiac disease was: AVSD in 30%, VSD in 35%, ASD in 9%, PDA in 5%, associated shunts in 5%, complex CHD in 10%, left heart obstruction in 2.5%, pulmonary veins anomalous in 2.5% and TGA in 1%. CHD was native in 122 cases (77%), seven had palliation (4%) and 30 complete repair (19%). Pulse oxygen saturation was 84 ± 12% (range 44 to 98%), lower in non-operated or palliated cases (81%) than in repaired cases (92%, P = 0.002). Patients were in NYHA class I (18%), class II (42%), class III (37%) or IV (3%), not different with previous repair or not. Target therapy agents were given in 35% of the cases (one agent in 20%, two associated in 13%, intravenous epoprostenol in 1.5%). Death occurred in 26 patients (16%) at the age of 29.3 ± 17.8years. Complications occurred in most of the cases (64%) including: hemorrhages events, syncope, stroke, cerebral abscess, infective endocarditis, heart failure or arrhythmias. NYHA class did not differ between patients with or without target therapy. SpO2 was 82% in untreated patients with or without target therapy. SpO2 was 82% in untreated patients with or without target therapy.

Conclusion.— The survival rate of adult patients with Eisenmenger Syndrome seems to improve up to 50 years of age with target therapy agents. These results have to be confirmed by larger scale multicentre studies.

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35 Infective endocarditis in adults with congenital heart disease
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Background.— Infective endocarditis (IE) may adversely impact on long term prognosis of patients with CHD reaching adulthood (ACHD). The aim of this study was to assess the features and outcome of IE in ACHD.

Patients and methods.— Design is a single centre retrospective chart review of IE episodes in patients with CHD and aged > 18y at diagnosis. Demographics, past cardiac history, clinical and echocardiographic, therapeutics data and outcomes were reviewed.

Results.— From 1980 to 2011, 33 patients were included, mean age 29 years at IE (range 18 to 76). Underlying CHDs were: native VSD in 22%, cyanotic CHD in 35%, AVSD in 6%, aortic valve lesion in 22% and miscellaneous in 10%. CHD was repaired in 19%, palliated in 27% and non-operated in 54%. Thirty percent had received antibiotics prior to IE diagnosis. Heart failure occurred in 22% of cases, septic shock in 11%, neurological complication in 11%, splenomegaly was present in 46% and fever in 100% of cases. Source of infection was dental in 35%, cutaneous in 25%, ENT in 5%. The microbial causal agent was Staphylococcus in 46% and Streptococcus in 32.5%, unknown in 8%. Echocardiographic vegetations were found in 49% of the cases, valves perforation or abscesses occurred in 11% and 24%. Embolic events were frequent (62%). Surgery was performed in 30% of cases, a median of 21 days after onset of IE (1 day to 5 months). Hospital stay was 2 weeks to 6 months. Mortality was 11% and two cases recurred.

Conclusion.— IE severely impacts the prognosis of ACHD, especially in patients with cyanotic CHD. Embolic events are frequent complications. Prophylaxis should mainly focus on cutaneous and dental procedures.

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36 Preoperative Staphylococcus aureus carriage and risk of surgical site infection after cardiac surgery in children: A pilot cohort study
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Aims.— The objectives of this pilot prospective monocenter cohort study were to describe Staphylococcus aureus (SA) colonization in children before cardiac surgery and to compare the incidence of surgical site infection (SSI) and other nosocomial infections between preoperative carriers and non-carriers.

Methods.— During 9 months, all children < 1 year undergoing cardiac surgery had preoperative methicillin-resistant (MRSA) and methicillin-sensitive SA ( MSSA) screening by real-time PCR (genXpert System, Cepheid®). The only exclusion criterion was invalid PCR. All patients were followed regarding SSI and other nosocomial infections. The primary outcome was the comparison of incidence of SSI among colonized and non-colonized patients.

Results.— Among the 42 studied patients (mean age 2.7 ± 3 months, mean weight 4.4 ± 1.6 kg, mean CPB time 120 ± 44 min, mean hospital length of stay 19.4 ± 20.9 days, mean intensive care unit length of stay 8.2 ± 4.2 days), overall rates of carriage of SA and of SSI were respectively 24% (21% with MSSA and 2.4% with MRSA) and 34.1%. Microorganisms were identified in 36% of the 11 cases of SSI (9% of MSSA, 9% of MRSA and 18% of coagulate negative staphylococci (CNS)). Incidence of SSI was not different between carriers and non-carriers (30% vs 25% respectively, P = 0.29). Only one CHS bacteremia and no pneumonia were documented in the cohort.

Conclusions.— This pilot highlights that colonization with SA is frequent in our country whereas MRSA prevalence is low. At this stage, data are insufficient to conclude regarding the relationship between SA carriage and the risk for developing SSI.

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37 Cardiovascular involvement in Kawasaki disease in Algerian children: Our experience
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Background.— Kawasaki disease (KD) is an acute, self-limiting vasculitis of unknown etiology. The incidence of KD is increasing worldwide. However, there is a lack of data on Kawasaki disease and its effect on coronary arteries in Algeria and other developing countries.

Objective.— To describe the pattern of cardiovascular involvement in Algerian children admitted with Kawasaki disease and to highlight the practical difficulties.
Methods.— This retrospective study included children admitted with Kawasaki disease at the paediatric unit over a period of 7 years from September 2005 to December 2012. A standardized form was used to collect demographic data, clinical information, and echocardiography and laboratory results.

Results.— Ninety-four patients with KD, with a mean age of 31 months were identified. There were 51 boys and 43 girls (sex ratio: 1.2). Twenty-three children (24%) had evidence of cardiac complications: 21(22%) had coronary artery abnormalities; one child had mitral regurgitation, one had pericardial effusion. Of the 21 children with coronary abnormalities, eight had coronary dilatation, 13 had coronary aneurysms (ten small and medium, three giant). These abnormalities regressed in 13 cases on follow up. No cases of acute myocardial infarction and no fatal outcomes were recorded during the follow-up period. The only independent variable for prediction of coronary involvement was fever > 16 days duration. We failed to detect a statistically significant association between the frequency of coronary sequels and any of the following (age, sex, white blood cell counts, platelet count; erythrocyte sedimentation rate and C Reactive Protein).

The therapeutic used in this study include an immunoglobulin treatment for only 58% of the children, half of which received it within the first ten days of the onset of the disease.

Conclusion.— A high incidence of coronary artery involvement was found in our study. This work raises the necessity of having a national data collection that will allow to better appreciate the incidence of this disease and therefore better identify and treat it in a timely fashion manner.

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