

PEDIATRIC CARDIOLOGY REFERRAL GUIDELINES



PEDIATRIC CARDIOLOGY REFERRAL GUIDELINES

TABLE OF CONTENTS

HEART MURMUR	P 2
PALPITATIONS	P 2
ARRHYTHMIA	P 2
ABNORMAL ECG	P 2
CHEST PAIN	Р 3
SYNCOPE	Р 3
HYPERTENSION	P 4
ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)	P 4
KAWASAKI DISEASE	P 4
GENETIC DISORDERS:	
MARFAN	P 5
TURNER	P 5
DOWNS	P 5
DIGEORGE	P 5
NOONAN	P 5
MUSCULAR DYSTROPHY	P 5
PREMATURE 5TERM INFANTS WITH:	
PATENT DUCTUS ARTERIOSUS (PDA)	P 5
ATRIAL SEPTAL DEFECT (ASD)	P 5
SMALL VENTRICULAR SEPTAL DEFECT (VSD)	P 5
HYPERLIPIDEMIA	P 6

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939 **choc.org**



HEART MURMUR [ICD-9 CODE: 785.2] [ICD-10 CODE: R01.1, R01.0]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
< 1 month or any age with symptoms: (Failure to thrive/poor feeding, cya- nosis, decreased pulses, respiratory distress)	Please call Cardiology for immediate consulta- tion 714-509-3939	None	Consult; Pulse oximetry; ECG; Echocardiogram; Chest X-ray	Cardiac catheterization; Chest CT with angiogram; Cardiac MRI
1 to 6 months AND asymptomatic	Within two weeks	None	Consult; Pulse oxime- try; ECG; Echocardio- gram; Chest X-ray	Cardiac catheterization; Chest CT with angiogram; Cardiac MRI
> 6 months AND asymptomatic	First Available	None	Consult; Pulse oxime- try; ECG; Echocardio- gram	Cardiac catheterization; Chest CT with angiogram; Cardiac MRI

PALPITATIONS [ICD-9 CODE: 785.1] [ICD-10 CODE: R00.2] ARRHYTHMIA [ICD-9 CODE: 427.9] [ICD-10 CODE: I49.9] ABNORMAL ECG [ICD-9 CODE: 794.31] [ICD-10 CODE: R94.31]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
Asymptomatic	First available	None	Consult; ECG; Echo- cardiogram; 24-hour Holter monitor	30-day event monitor; Exercise stress test; Electrophysiology study

Cont'd>>>

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939 **choc.org**



CHEST PAIN [ICD-9 CODE: 786.5*] [ICD-10 CODE: R07.*] SYNCOPE [ICD-9 CODE: 780.2] [ICD-10 CODE: R55]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
Exertional	Within one week or call Cardiology clinic nurse for triage 714-509-3939	None-Recommend activity restriction until cardiology visit	Consult; ECG; Echo- cardiogram; Exercise stress test w/ pulmo- nary function test	30-day event monitor; Exercise stress test; Cardiac catheterization with electro- physiology study; Cardiac MRI
Nonexertional	First available	None	Consult; ECG; Echo- cardiogram	30-day event monitor; Exercise stress test; Cardiac catheterization with electro- physiology study; Cardiac MRI

HYPERTENSION [ICD-9 CODE: 401.9] [ICD-10 CODE: 110]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
Average SBP/DBP ≥ 90th % with comorbid factors over 3 visits or ≥ 95th % for age/sex/ height	First available	Basic metabolic panel, CBC, Thyroid function tests based on history: +/- HgbA1C, Cholesterol panel, Renal workup	Consult; ECG; Echo- cardiogram	Cardiac catheterization; Chest CT with angiogram

Reference:

Diagnosis, management and treatment of high blood pressure in children and adolescents (2004) http://www.nhlbi.nih.gov/health/prof/heart/hbp/hbp_ped.pdf Tables 3 and 4-Blood pressure levels for boys and girls by age and height percentile

Cont'd>>>

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939 **Choc.org**



ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) [ICD-9 CODE: 314.01] [ICD-10 CODE: F90

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization		
Abnormal ECG	First available	None	Consult; ECG; Echo- cardiogram; 24-hour Holter monitor	Further Testing May Include: Exercise stress test	
Reference: AHA scientific statement for cardiovascular monitoring of children receiving medications for ADHD (2008)					

http://circ.ahajournals.org/content/117/18/2407.full.pdf

Table 3-Cardiac effects of medications used to treat ADHD

Table 4-ECG findings and referral recommendations

http://circ.ahajournals.org/content/110/17/2747.full.pdf

KAWASAKI DISEASE

[ICD-9 CODE: 446.1] [ICD-10 CODE: M30.3]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
Uncomplicated (No or transient coronary artery ectasia/minimal cardiac involvement)	2 weeks and 6-8 weeks post onset of illness	None	Follow up visit; ECG; Echocardiogram	None
Complicated	To be determined based on inpatient cardiology consult	None	Follow up visit; ECG; Echocardiogram	Chest CT with angiogram; Cardiac catheterization
Reference: Diagnosis, treatment, and long term management of Kawasaki Disease (2004)				

Cont'd>>>

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939

PEDIATRIC CARDIOLOGY **REFERRAL GUIDELINES**



GENETIC DISORDERS: MARFAN [ICD-9 CODE: 759.82] [ICD-10 CODE: Q87.4*] TURNER [ICD-9 CODE: 758.6] [ICD-10 CODE: Q96.*] DOWNS [ICD-9 CODE: 758.0] [ICD-10 CODE: Q90.*] DIGEORGE [ICD-9 CODE: 279.11] [ICD-10 CODE: D82.1] NOONAN [ICD-9 CODE: 759.89] [ICD-10 CODE: Q87.89] [ICD-9 CODE: 359.*] [ICD-10 CODE: G71.*] MUSCULAR DYSTROPHY **Pre-Referral Workup** Timeframe **Refer to Cardiology Pre-Authorization** Further Testing May Include:

When suspected

First available

None

Consult: Pulse oximetry: ECG: Echocardiogram: Chest X-ray

Chest CT with angiogram: Cardiac catheterization

PREMATURE [ICD-9 CODE: V21.3*] [ICD-10 CODE: P07.0*, P07.1*, P07.3*] **OR TERM INFANTS WITH:**

PATENT DUCTUS ARTERIOSUS (PDA) ATRIAL SEPTAL DEFECT (ASD) SMALL VENTRICULAR SEPTAL DEFECT (VSD)

[ICD-9 CODE: 747.0] [ICD-10 CODE: Q25.0] [ICD-9 CODE: 745.5] [ICD-10 CODE: Q21.1] [ICD-9 CODE: 745.4] [ICD-10 CODE: Q21.0]

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
Asymptomatic	1 - 2 months post discharge	None	Consult; Pulse oximetry; ECG; Echocardiogram; Chest X-ray	None
Symptomatic	To be determined based on inpatient cardiology consult	None	Follow up visit; Pulse oximetry; ECG; Echo- cardiogram; Chest X-ray	None Cont'd>>>

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939



HYPERLIPIDEMIA [ICD-9 CODE: 272.4] [ICD-10 CODE: E78.4, E78.5]

Workup

Fasting lipid profile

Screen Patients

- Age 2 10 yrs. if family history of dyslipidemia or early cardiovascular disease (< 55 yrs. for men/ < 65 yrs. for women)
- Patient overweight (body mass index 85 95th %) or obese (BMI > 95th %)
- Systemic hypertension (SBP/DBP \ge 95th %)
- Diabetes mellitus

Refer to Cardiology	Timeframe	Pre-Referral Workup	Pre-Authorization	Further Testing May Include:
 Triglyceride level >200 Patients with BMI ≥ 90th % and elevated triglycerides (<500mg/dl) See lipid referral and treatment guidelines LDL > 160 and no family history of CVD LDL> 130 with family history of premature CVD or cerebro- vascular disease. 	 First available Priority schedul- ing for TG ≥ 500 Please call the Cardiology clinic nurse for triage on TG ≥ 1000 714-509-3939 	 Fasting Lipid Profile, Complete Metabolic Panel, Urinalysis, T4, TSH, HgbA1c Consider referral to: PODER (Prevention of Obesity and Dia- betes through Edu- cation and Resourc- es) for all ages 714-509-7323 N.E.W. You Nutrition Class for adolescents 714-509-8455 	Consult; ECG; Echocardiogram	None

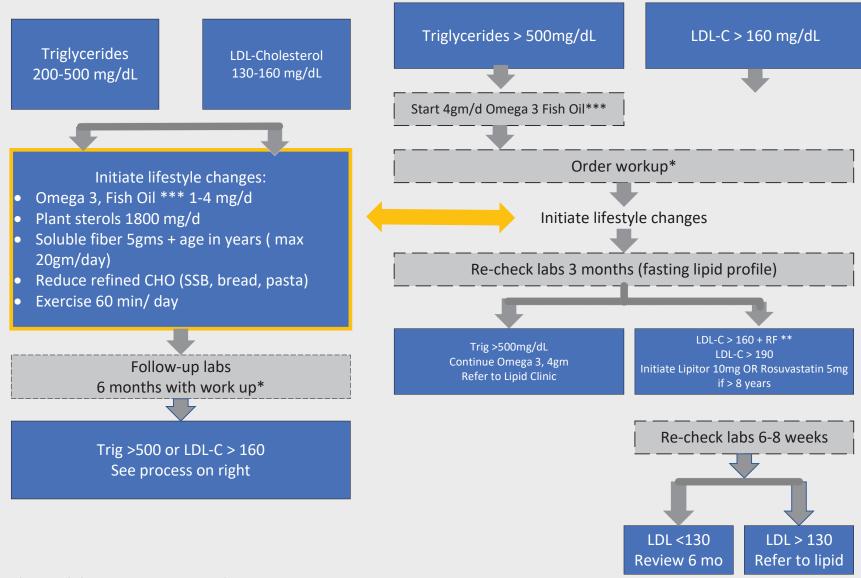
Reference:

Lipid screening and cardiovascular health in childhood (2008) http://pediatrics.aappublications.org/content/122/1/198.full.pdf

Cont'd>>>

For appointments, please call the Patient Access Center at: 888-770-2462 (888-770-CHOC) Complete the CHOC Specialists Cardiology Referral Request Form located at http://www.choc.org/chocdocs/referral-guidelines/ Fax the Referral Request Form along with ALL pertinent medical records to: 855-246-2329 (855-CHOC-FAX) To speak with a CHOC Specialist in Cardiology, please call: 714-509-3939

Lipid Referral and Treatment Guidelines



*Workup to include: FLP, CMP, UA, T4, TSH, HgbA1c

** Risk factors: BMI > 85%, HTN, smoking, DM, CKD, ESRD, Inflammatory disease, CM, Kawasaki, PCOS, NAFLD, Pulmonary HTN, CHD c/w coronary translocation

*** If allergy to Fish use plant based Omega 3 such as Flax Seed



CHOC SPECIALISTS CARDIOLOGY CHOC COMMERCE TOWER 505 S. MAIN ST., SUITE 600 ORANGE, CA 92868

For appointments, please call 1-888-770-2462 Submit all pertinent medical records to: choc.org/referrals, or by fax 1-855-246-2329