

# Akbar molaei MD.

Associate Professor of Pediatric Cardiology  
Congenital interventional cardiologist  
Tabriz children hospital, Madani heart center  
Tabriz University of Medical Sciences (TBZMED)

## 1-PERSONAL INFORMATION

Name: Akbar

Surname: molaei

Place of birth: Meshkin shahr-province of Ardebil-Iran

Date of birth: 11th august 1965

Nationality: Iranian

Language: Azeri, Persian, English, Turkish

Date of last Revision of this C.V.: June, 29, 2021

Present position: Associate professor of pediatric cardiology, Tabriz University of Medical Sciences, congenital interventional cardiologist

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## 2-EDUCATIONAL HISTORY

**1- TIME:** 1986-1993(about seven years) **TRAINING COURSE:** Medicine **UNIVERSITY:** Iran University of Medical Sciences **DEGREE/QUALIFICATION OBTAINED** M.D.

**2- TIME:**1999-2002 (three years) **TRAINING COURSE:** Residency of Pediatrics **UNIVERSITY:** Tabriz University of Medical Sciences (Tabriz Children Hospital) **DEGREE/QUALIFICATION OBTAINED** National board of pediatrics.2002.

**3- TIME:** 2005-2008 (three years)**TRAINING COURSE:** Fellowship of pediatric cardiology **UNIVERSITY:** Iran University of Medical Sciences (Rajaei cardiovascular & medical research center,) **DEGREE/QUALIFICATION OBTAINED** Obtaining The second Rank in National Board of Pediatric Cardiology in Iran in 2008.

**4- TIME:** 2009-2011 (1.5 years)**TRAINING COURSE:** Fellowship of pediatric interventional cardiology **UNIVERSITY:** Iran University of Medical Sciences (Rajaei cardiovascular & medical research center) , Bochum university,(nord rein Westfalen heart and diabetic center, HDZ-NRW, bad oienhausen, Germany. **DEGREE/QUALIFICATION OBTAINED:** pediatric interventional cardiology fellow.2011.

## 3-PRESENTATIONS

**1-** Shahmohammadi A., molaei A. Electrocardiography in children: A need or necessity., Tehran, Dr. gharib Congress of Pediatrics, 2006.

**2-** A. Molaei, S.M. Meraji, P. Nakhostin Davari, M. Y. Aarabi, Moghaddam and A. Shah Mohammadi, Assessment Of The Results Of The Secundum Atrial Septal Defect Closure In Two Methods: Surgery (Right Thoracotomy); And Intervention (By Transcatheter Amplatzer septal occluder) , Tehran, second international congress of Iranian society of pediatric cardiology, 2009.

**3-** Akbar Molaei, Mohammad Yusof Aarabi Mogaddam, ParidokhtNakhostin Davari, Akbar Shahmohammadi, Mahmood Meraji , Validity of Sildenafil Test in Patients with Pulmonary Arterial

Hypertension Associated with Congenital Heart Disease According to Clinical and Echocardiographic Parameters ,

Tehran, second international congress of Iranian society of pediatric cardiology, 2009.

4- Molaei A., Outcomes of neonates with congenital heart disease in Tabriz university of medical sciences, Tabriz, Congress of Iranian neonatal health, 2009.

5- Molaei A., Perioperative management of PAPVC & TAPVC, Tehran, 6<sup>th</sup> International Congress of Iranian society of cardiac surgeons(ISCS), 2009.

6-Akbar Molaei, MD, Mahmood Merajie, MD, Hodjjat Mortezaeian, MD, Elaheh Malakan Rad, MD, FACC, Rahele Haji Heidar Shemirani, BD, Complications of Aortic Stenting in Patients below 20 Years Old: Immediate and Intermediate Follow-Up, Tehran, third international congress of Iranian society of pediatric cardiology, 2011.

7- Akbar Molaei, MD, Mahmood Merajie, MD, Elaheh Malakan Rad, MD, FACC, Native Right Ventricular Outflow Tract Stenting in a Child With Tetralogy of Fallot And Absent Left Pulmonary Artery, third international congress of Iranian society of pediatric cardiology, 2011, Tehran, Iran.

8- Akbar Molaei MD. Cyanotic heart diseases. ürək-damar xəstəliklərinin bu günü və gələcəyi: IV regional Beynəlxalq elmi praktiki konfrans. naxcivan, 09-10 dekabr ,2011.

9-- Akbar Molaei, Bahman Rastkar Hemmati, Hashem Khosroshahi, Madjid Malaki, Roya Zakeri. Misdiagnosis of Bland-White-Garland Syndrome: Report of Two Cases with Different Presentations. 6th World Congress of Paediatric Cardiology and Cardiac Surgery: South Africa, Cape Town, 17 - 23 February 2013.

10- Akbar molaei, nonsurgical management of infantile COA. Fourth international congress of Iranian society of pediatric cardiology, April 2013, Tehran, Iran.

11-Akbarmolaei, abbas afrasiabi, mahmood samadi, eisa bilejani, periventricular mVSD closure by device under epicardial echocardiography guidance, Fourth international congress of Iranian society of pediatric cardiology, April 2013, Tehran, Iran.

12- Akbar molaei, Infective endocarditis, Seminar of antimicrobial resistance and logic prescription of antibiotics, June 2013, Tabriz Iran

13- Akbar molaei, critical CHDs in neonates, Seminar of healthy child, November 2013, Tabriz Iran.

14- Akbar molaei, Collateral arteries and Arterio-venous fistulas closure by device, International congress of minimally invasive surgeries, January 2014, Tehran, Iran.

15- Akbar molaei, Controversies of aortic valvuloplasty in children, 5<sup>th</sup> congress of Iranian society of pediatric cardiology, may. 2015, Tehran, Iran.

- 16- Akbar molaei, Pediatric therapeutic cardiac catheterization, new advances of pediatric and neonatal diseases, November 2015, Tabriz, Iran.
- 17- Akbar molaei, Percutaneous angioplasty versus surgical repair of COA, congenital and structural heart diseases, Jan. 2016, Mashhad, Iran.
- 18- Akbar molaei, Snaring method for the COA angioplasty, First congress of clinical cases in complex cardiovascular therapy (CCCCT), April 2016, shiraz, Iran.
- 19- Akbar molaei, Interesting case presentation on CHD, 8<sup>th</sup> cardiovascular razavi congress, August 2016, Mashhad, Iran.
- 20- Akbar molaei, Emergent pediatric therapeutic cardiac catheterization, First international congress of trauma and emergency critical care, October 2016, Tabriz, Iran.
- 21- Akbar molaei, Up to date cardiac considerations in newborns and infants, New advances of pediatric and neonatal diseases, November 2016, Tabriz, Iran.
- 22- Akbar molaei, Challenges of Trans-catheter closure of secundum type Atrial Septal Defects, 5<sup>th</sup> international joined cardiovascular congress of Iran, February 2017, Tehran, Iran.
- 23- Akbar molaei, Trans-catheter closure of multiple secundum type ASDs, Second congress of clinical cases in complex cardiovascular therapy (CCCCT), April 2017, shiraz, Iran.
- 24- Akbar molaei, Challenging Cases in CHD Intervention, 6<sup>th</sup> congress of Iranian society of pediatric cardiology, may. 2017, Tehran, Iran.**
- 25- Akbar molaei, ASD Device Embolization (Night mare in CHD intervention), 6<sup>th</sup> congress of Iranian society of pediatric cardiology, may. 2017, Tehran, Iran.
- 26- Akbar molaei, Impact of Cardiac Disease on Other Organ Systems, New advances of pediatric and neonatal diseases, August 2017, Tabriz, Iran.
- 27- Akbar molaei, Critical pulmonary valve stenosis in a premature neonate; A challenging access. Caspian meeting, November 2017, Mashhad, Iran.
- 28- Akbar molaei, Tips and tricks of multiple ASDs closure by trans catheter technique, Caspian meeting, November 2017, Mashhad, Iran.
- 29- Akbar molaei, Complicated ASD2 closure by device, Third congress of clinical cases in complex cardiovascular therapy (CCCCT), April 2018, shiraz, Iran.
- 30- Akbar Molaei; How to avoid and manage major complications during congenital cardiovascular catheterizations; 8<sup>th</sup> kowsar hospital congress; April 2018; shiraz, Iran.
- 31- Akbar Molaei; Novelty of epidemiology and prevention of congenital heart defects; Congress of children and neonate updates; July 2018; Tabriz, Iran.
- 32- Akbar molaei; Challenging case of perimembranous VSD closure; 7<sup>th</sup> Iranian joint congress of cardiology. march 2019, Tehran, Iran.
- 33- Akbar Molaei; How should you deal with transcatheter ASD closure complications; 4<sup>th</sup> congress of clinical cases in complex cardiovascular therapy (CCCCT), April 2019, shiraz, Iran.
- 34- Akbar Molaei; When you accost nightmare in the cath lab. Caspian meeting 2019, Mashhad, Iran.

35- Akbar Molaei; Native Right Ventricular Outflow Tract Stenting in a Child with Tetralogy of Fallot and Absent Left Pulmonary Artery; Caspian meeting 2019, Mashhad, Iran.

36- Akbar Molaei; Atrioventricular block after trans catheter VSD closure; Caspian meeting 2019, Mashhad, Iran.

37- Akbar Molaei; pulmonary arteriovenous fistula in children; Caspian meeting 2019, Mashhad, Iran.

#### **4- Theses supervision:**

1- Validity of pulse oximetry in diagnosis of critical congenital heart diseases of newborns. Sahar Salimi; 2010.

2- prognosis of the newborns with congenital heart diseases; Maryam Khoshbakht; 2012.

3- Assessment of the prevalence and effect of hypophosphatemia in immediate outcome of open heart surgery in infants and children. Ali Talei, 2014.

4- comparison of pediatric cardiovascular diseases findings of chest radiography with echocardiography; Morteza Golipoor; 2016.

5- Comparison of The Results of the Secundum Atrial Septal Defect Closure by Two Methods: Surgery and transcatheter Intervention (By septal occluder); Mahya Rahimi Partovi; 2018.

6- Comparison of The Early Results of ventricular Septal Defect Closure by Two Methods: transcatheter and open heart Surgery. Ali Rafiei MD; June 2019.

7- Evaluation of midterm results of native coarctation of aorta (COA) in neonates, infants and children. Franak Ghasemi MD; October 2019.

8- Assessment of the validity of cardiac biomarkers in the Kawasaki patients. Azizollah Khamahani MD; 2020

#### **5-PUBLISHED PAPERS:**

1- Akbar Molaei, Mohammad Yusof Aarabi Mogaddam, Paridokht Nakhostin Davari, Akbar Shahmohammadi, Mahmood Meraji, Validity of Sildenafil Test in Patients with Pulmonary Arterial Hypertension Associated with Congenital Heart Disease According to Clinical and Echocardiographic Parameters, *J Teh Univ Heart Ctr 2 (2009) 103-108.*

2- A. Molaei, S.M. Meraji, P. Nakhostin Davari, M. Y. Aarabi, Moghaddam and A. Shah Mohammadi, Assessment of The Results of the Secundum Atrial Septal Defect Closure in Two Methods: Surgery (Right Thoracotomy); And Intervention (By Transcatheter Amplatzer septal occluder), *IRANIAN HEART JOURNAL (IHJ) SUMMER 2010; 11(2):55-58.*

- 3-** A Molaie, A Tabib, M Meraji, RHH Shemirani, Inverted Left Atrial Appendage: A Cause of Left Ventricular Inflow Obstruction. *Iranian Cardiovascular Research Journal*, 2010; 4(3):139-141.
- 4-** Akbar Molaie, MD, Mahmood Merajie, MD, Hodjjat Mortezaeian, MD, Elaheh Malakan Rad, MD, FACC, Rahele Haji Heidar Shemirani, BD. Complications of Aortic Stenting in Patients below 20 Years Old: Immediate and Intermediate Follow-Up, , *J Teh Univ Heart Ctr* 2011;6(4):202-205.
- 5-** Akbar Molaie, Majid Malaki, Shahram Sadegvand, The Effect of Cyanosis on Active Clotting Time During Diagnostic Catheterization, *Journal of Cardiovascular and Thoracic Research*, 2012, 4(2), 49-52.
- 6-** Molaie S, Mohebbali M, Molaie A, Akhoundi B, Zarei Z, Moradi Asl E, Modarres Sadrani N, Rakhshidan Z, Faragi F, Distribution of Blood Groups (ABO) between Symptomatic & Asymptomatic Human Leishmania Infantum Infection in Human. *Armaghane-danesh*, sep. 2013, 18(5), 400-409.
- 7-** Akbar Molaie<sup>1</sup>, MD; Mahmud Meraji<sup>1</sup>, MD; Elaheh Malakan Rad<sup>2</sup>, MD, FACC. Native Right Ventricular Outflow Tract Stenting in a Child with Tetralogy of Fallot and Absent Left Pulmonary Artery. *Iran J Pediatr*; Vol 24 (No 1), Feb 2014.
- 8-** Akbar Molaie, Bahman Rastkar Hemmati, Hashem Khosroshahi, Madjid Malaki, Roya Zakeri. Misdiagnosis of Bland-White-Garland Syndrome: Report of Two Cases with Different Presentations. *J Cardiovasc Thorac Res*, 2014, 6(1), 65-67.
- 9-** Akbar Molaie, Babak Abdinia, Roya Zakeri, Ali Talei. Diagnostic Value of Chest Radiography in Pediatric Cardiovascular Diseases: A Retrospective Study in Tabriz, Northwest of Iran. *Int J Pediatr (Supplement.1)*, Vol.3, N.2-1, Serial No.15, March 2015.
- 10-** Akbar Molaie, Gholamreza Asadi, Maryam Khosrbakht. Prognosis of the Newborns with Congenital Heart Diseases. *Advances in Bioscience & Clinical Medicine* 2015-05-03 DOI: 10.7575/aiac.abcmed.15.03.03.08.
- 11-** Soheila Molaie, Mehdi Mohebbali, Mohamad-Reza Abai, Akbar Molaie, Behnaz Akhoundi, Eslam Moradi Asl. Alteration of Direct Agglutination Test (DAT) results in Iranian Kala-Azar patients: a case series. *J Parasit Dis*. Aug.31.2016.
- 12-** Akbar Molaie, MD<sup>\*</sup>, Abbas Afrasiabi, MD, Eisa Bilejani, MD, Mahmud Samadi, MD. Periventricular Muscular Ventricular Septal Defect (VSD) Closure under Epicardial Echocardiography Guidance: A Case Report. *J Teh Univ Heart Ctr* 2017;12(3):138-141.
- 13-** Akbar Molaie,<sup>1,\*</sup> Mahmud Samadi,<sup>1</sup> Shamsi Ghaffari Bavili,<sup>1</sup> and Ahmad Jamei Khosroshahi. Radiation Dose in Diagnostic and Therapeutic Procedures of Congenital Heart Diseases in Children. [Multidiscip Cardio Annal](#). 2017; 8(1): e10361.
- 14-** Akbar Molaie<sup>\*</sup>, Isa Bilejani, Alihosein Zeinalzade. Early Results of Balloon Angioplasty of Native Coarctation of Aorta Under 2 Years Old. *Crescent Journal of Medical and Biological Sciences*. Vol. 4, No. 2, April 2017, 69–73.
- 15-** Ali Talei, Akbar Molaie<sup>\*</sup>, Shamsi Ghaffari. Assessment of the prevalence and effect of hypophosphatemia in immediate outcome of open heart surgery in infants and children. *The Journal of Urmia University of Medical Sciences*, Vol. 28(1), April 2017.

16- Akbar Molaie. Comparison of sedative and adverse effects of hydroxyzine hydrochloride and chloral hydrate in children who undergo echocardiography. *Med J Tabriz Uni Med Sciences Health Services*. 2017 August;39(3):70-75.

17- Akbar Molaie\*, Mahmood Samadi, Shamsi Ghaffari, Ahmad Jamei Khosroshahi and Ali Rafiei. Results of Transcatheter Arterial Duct Occlusion in Patients who had Pulmonary Hypertension with Congenital Cardiovascular Defects. *Acta Scientific Paediatrics* 1.5 (2018): 10-14.

18- Ahmad Jamei Khosroshahi, Akbar Molaie, Mahmood Samadi\*, Elnaz Eskandartash. The correlation between serum level of brain natriuretic peptide and amount of left to right shunt. *J Cardiovasc Thorac Res*, 2019, 11(1), x-x.

19- Molaie A, Khomahani A, Sadeghi-Shabestari M, Ghaffari Sh, Sadat-Ebrahimi SR. Cardiac Biomarkers for Early Detection of Cardiac Involvement in Children with Kawasaki Disease: A Cross-Sectional Study. *Int J Pediatr* 2019; 7(12): 105735-582. DOI:10.22038/ijp.2019.43387.3617.

20- Akbar Molaie<sup>1</sup>, Shamsi Ghaffari<sup>2</sup>, Shahryar Anvari<sup>3</sup>, Mahya Rahimi Partovi<sup>4</sup>  
[Comparison of the Results of Secundum Atrial Septal Defect Closure by Transcatheter and Open-Heart Surgery in the North West of Iran](#) *Crescent Journal of Medical and Biological Sciences* . 2021 Winter;8(1):077-080 .

21- Ali Rafiei<sup>1</sup>, Akbar Molaie<sup>1</sup>, Ahmad Jamei Khosroshahi<sup>1</sup>, Mahmood Samadi<sup>1</sup>, Shamsi Ghaffari<sup>1</sup>  
[The Comparison of the Early Outcomes of Perimembranous Ventricular Septal Defect Closure by Two Different Methods: Transcatheter and Open-Heart Surgery in the Northwest of Iran](#) *Crescent Journal of Medical and Biological Sciences* . 2021 ;8(4):

## 6-Published books:

- 1- Rogaiyeh Ghaffari, Akbar Shahmohammadi, Akbar Molaie. *Cardiac intensive care in neonates, infants, children, adolescents and adults*; Kooshamehr, Shiraz, Iran. 2008.
- 2- Akbar Molaie, Rahele Haji Heidar Shemirani, *Common terminology and abbreviations of cardiology with explanations in English and Persian*. Shervin, Tabriz, Iran, 2013.

## 7- Executive activities:

- 1- pioneer of pediatric therapeutic catheterization in Madani Heart Center (Tabriz, Iran); since April 2011.
- 2- Member of board of directors of Iranian Society of Pediatric Cardiology; April 2013- April 2016.
- 3- Member of children and neonatal morbidity and mortality committee of Madani Heart Center (Tabriz, Iran); since October 2013.
- 4- Director of pediatric catheterization laboratory of TBZ-MED since February 2014.
- 5- Member of health ministry committee for pediatric ward evaluation; July 2017.

## 8- Review activities:

- 1- 2014 march- 26; IRJPEH-14-007; Effect on Natural Course of Pulmonary Vascular Diseases in Isolated Atrial Septal Defect at High Altitude. IRJPEH.
- 2- 2014 May-25; CTY-14-Mar-139;"Outcome of isolated ventricular septal defect considered too small to warrant operation." Cardiology in the Young.
- 3- 2014 Aug 18; Effects of Intravenous Indomethacin on Reduction of Symptomatic Patent Ductus Arteriosus Cases and Decreasing the Need for Prolonged Mechanical Ventilation. JCVTR\_1789\_20140516122639.
- 4- 2014 Aug 27; A Study on the Mortality and Complication Rates Following Percutaneously Adjustable Pulmonary Artery Banding.JCVTR\_20121024104003.
- 5- . 2014 Sep 18; Transcatheter Versus Surgical Closure of Atrial Septum Defect: A Debate from a Developing Country. JCVTR\_2216\_20140912103829.
- 6- 2014 Sep 25; The Effect of Pulmonary Valve Replacement (PVR) Surgery on Hemodynamics of Patients Who Underwent Repair of Tetralogy of Fallot (TOF). JCVTR\_2265\_20140922121648.
- 7- 2014 Dec- 14; Transient and diffuse pincer nail deformity in a 3 mo old infant with Kawasaki disease and severe coronary arteries involvement. MJ-UMS.
- 8- 2015 Sep 15; Children with Tetralogy of Fallot in an Urban Centre in Africa. JCVTR\_3437\_20150831235619.
- 9- 2016 Feb 7; Pyruvate kinase deficiency and its gene mutations in newborns with jaundice in East Azerbaijan province year 2014. Medical Journal of TBZ-MED.3426.
- 10-2016 Sep 22; Reactivation of BCG scar as a diagnostic tool in Kawasaki disease: A case report. JCVTR\_3437\_20160913031957.
- 11-2016 Nov 15; Pulmonary valve replacement in patients with corrected tetralogy of Fallot.JCVTR\_14711\_20161005085148.
- 12-2017 Mar 17; The role of preoperative sildenafil therapy in controlling of postoperative pulmonary hypertension in children with ventricular septal defects. JCVTR\_2164\_20170119083253.
- 13- 2017 may-5; Assessment of Long term results of valved patch repair of VSD accompanied by pulmonary hypertension. Children health research center.58331.
- 14- 2017 jun-9; OMJ-D-17-00102; Supra-cardiac total anomalous pulmonary venous connection via rare right-sided vertical vein. Oman Medical Journal.
- 15- 2017 july-10; prevalence of long QT syndrome in children with congenital deafness. Children health research center.58332.
- 16- 2019 Apr 17; Development of Superior Vena Cava to Pulmonary Vein Fistulae in presence of PAPVC Following Fontan Operation: Case Report of a Rare Anomaly and Embolization Therapy. jcvtr-27456.

- 17- 2019 May 03; A comprehensive in silico analysis, distribution and frequency of human *Nkx2-5* mutations; A critical gene in congenital heart disease. jcvtr-27482.
- 18- 2019 may-17; congenital heart disease screening in newborns that undertook ICU care according to clinical manifestations and pulse oximetry. Medical Journal of TBZ-MED.3670.
- 19- 2020 Apr-07; "A Meta-analysis of the safety and efficacy of sildenafil therapy for children pulmonary hypertension focusing on mortality" CTY-20-Mar-144, Cardiology in the Young.
- 20- 2020 May 09; Best Management in Isolated Right Ventricular Hypoplasia with Septal Defects in Adults. jcvtr-28800.
- 21- 2020 May 09. Recurrence of Cardiac Defects Among Siblings. Could this pose an urgent need for genetic and chromosomal analysis? but where is the where withal in Nigeria? jcvtr-28867.
- 22- 2020 May 24; The Effect of High-Density versus Standard Formula on Weight Gain in Children Following Congenital Heart Surgery: A Systematic Review of Randomized Clinical Trials. jcvtr-28862.

### **Research Projects:**

- 1- Akbar Molaie, Roya Zakeri, Ali Talei. Diagnostic Value of Chest Radiography in Pediatric Cardiovascular Diseases
- 2- Molaie A, Khomahani A, Sadeghi-Shabestari M, Ghaffari Sh, Sadat-Ebrahimi SR. Cardiac Biomarkers for Early Detection of Cardiac Involvement in Children with Kawasaki Disease