Youth-onset Type 2 Diabetes Manifestations in Other Specialties – its Many

Disguises

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Supplementary materials

To uncover the most appropriate material for this narrative review, two approaches were taken:

- 1) A search of PubMed, using terms for the following topics:
 - a. Type 2 diabetes
 - b. Child/pediatric/adolescent
 - c. Specialties of interest (cardiology, dermatology, gynecology, gastroenterology, hepatology, respiratory, nephrology, otolaryngology, ophthalmology, psychiatry, transplant, polycystic ovary syndrome), as detailed in Table S1.
- The reference lists of these articles were searched to ensure that all topics were adequately identified.

The PubMed search, completed on 21 February 2018, returned 633 articles published in the last 10 years. Of these, 539 were considered irrelevant due to subject focus and 94 were investigated further. A total of 69 references are cited in this review. Some references were found from subsequent searches of the identified reference lists. Others from the original

list were not included if similar information was included in a reference, particularly when discussing the well-known aspects of youth-onset type 2 diabetes.

Major	Title	Title and abstract	MeSH	Whole article
"Diabetes	"Diabetes-Mellitus";			
Mellitus, Type	"Diabetes";			
2″	"Diabetics" AND			
	("Type 2" OR "Type-2"			
	OR "Type II" OR			
	"Type-II"); "Non-			
	insulin-dependent-			
	diabetes";			
	"Noninsulin-			
	dependent-diabetes";			
	"Noninsulin-			
	dependent diabetes";			
	"Noninsulin			
	dependent diabetes";			
	"NIDDM"; "Type-II-			
	diabetes"; "Type-2-			
	diabetes"; "T2DM"; or			
	"T2D"			
	Major "Diabetes Mellitus, Type 2"	MajorTitle"Diabetes"Diabetes-Mellitus";Mellitus, Type"Diabetes";2""Diabetics" AND ("Type 2" OR "Type-2" OR "Type II" OR "Type-II"); "Non- insulin-dependent- diabetes"; "Noninsulin- dependent-diabetes"; "Noninsulin- dependent diabetes"; 	MajorTitleTitle and abstract"Diabetes"Diabetes-Mellitus";Mellitus, Type"Diabetes";2""Diabetics" AND("Type 2" OR "Type-2"OR "Type II" OR"Type-II"); "Non-insulin-dependent-diabetes";diabetes";"Noninsulin-dependent-diabetes";"Noninsulin-dependent diabetes";"Noninsulin-dependent diabetes";"Noninsulin-dependent diabetes";"NIDDM"; "Type-II-diabetes"; "T2DM"; or"T2D"	MajorTitleTitle and abstractMeSH"Diabetes"Diabetes-Mellitus";Mellitus, Type"Diabetes";2""Diabetics" AND("Type 2" OR "Type-2"OR "Type 10" OR"Type-11"); "Non- insulin-dependent- diabetes";Woninsulin- dependent-diabetes";"Noninsulin- dependent diabetes";"Noninsulin- dependent diabetes";"Noninsulin- dependent diabetes";"Noninsulin- dependent diabetes";"Noninsulin- dependent diabetes";"NDDM"; "Type-11- diabetes"; "T2DM"; or "T2D"

Table S1. Overview of the search terms applied in the literature search of PubMed

Pediatric	"Child"; "Child	"Child"; "Children";	
	Health";	"Childhood";	
	"Pediatrics";	"Pediatric";	
	"Infant";	"Paediatric";	
	"Adolescent";	"Paediatrics";	
	or "Adolescent	"Pediatrics";	
	Health"	"Infant"; "Infants";	
		"Adolescent";	
		"Adolescents";	
		"Teen"; "Teens";	
		"Adolescence";	
		"Teenager";	
		"Teenagers";	
		"Youth"; or	
		"Youths"	
.			

Possible

symptoms

"Dermatology"; "Skin"Dermatology"; "Skin Disease"; "Dermatoses";Diseases"; Gynecology";"Dermatosis"; "Gynecology"; "Gynaecology"; "Genital Diseases, Female";"Gynecologic Diseases"; "Gynecologic Diseases";"Gastroenterology";"Female Genital Diseases"; "Female Genital"GastrointestinalDisease"; "Hepatology"; "Gastroenterology";Diseases"; "Respiratory"Gastrointestinal Diseases"; "GastrointestinalTract Diseases";Disease"; "Respiratory"; "Pulmonology";

"Cardiology";	"Respiratory Tract Diseases"; "Respiratory Tract		
"Cardiovascular Diseases";	Disease"; "Cardiology"; "Vascular Medicine";		
"Nephrology"; "Kidney	"Angiology"; "Cardiovascular Disease Specialty";		
Diseases";	"Cardiovascular Diseases"; "Cardiovascular Disease";		
"Otolaryngology";	"Nephrology"; R "Kidney Disease"; "Kidney		
"Otorhinolaryngologic	Diseases"; "Otorhinolaryngology"; "Otology";		
Diseases".	"Laryngology"; "Otorhinolaryngologic Diseases";		
	"Otorhinolaryngologic Disease";		
"Ophthalmology"; "Eye	"Otorhinolaryngological Disease";		
Diseases"; "Psychiatry";	"Otorhinolaryngological Diseases";		
"Primary Health	"Otolaryngological Diseases"; "Otolaryngological		
Care";"Mental Disorders";	Disease"; "Otorhinolaryngologic Disease"; "ENT		
"Transplants";	Diseases"; "ENT Disease"; "Otolaryngologic		
"Transplantation";	Diseases"; "Otolaryngologic Disease";		
"Polycystic Ovary	"ophthalmology"; "Eye Diseases"; "Eye Disease";		
Syndrome";	"Primary Health Care"; "Primary Healthcare";		
	"Primary Care"; "Psychiatry"; "Mental Disorder";		
	"Mental Disorders"; "Psychiatric Diagnosis";		
	"Behavior Disorders"; "Behaviour Disorders";		
	"Severe Mental Disorder"; "Severe Mental		
	Disorders"; "transplant lists"; "Transplant List";		
	"Transplantations"; "Transplantation";		

		"Transplants";
		"Tissue Transplants"; "Tissue Transplant"; "Tissue
		Grafts"; "Tissue Graft"; "Cell Transplants"; "Cell
		Transplant"; "Organ Transplants"; "Organ
		Transplant"; "Organ Grafts"; "Organ Graft";
		"Polycystic Ovary Syndrome"; "Stein-Leventhal
		Syndrome"; "Stein Leventhal Syndrome";
		"Sclerocystic Ovarian Degeneration"; "Sclerocystic
		Ovary Syndrome"; "Polycystic Ovarian Syndrome";
		"Polycystic Ovary Syndrome 1"; "Sclerocystic
		Ovaries"; "Sclerocystic Ovary";)
	"Dermatologists";	"Dermatologist"; "Dermatologists"; "Gynecologist";
	"Castroontorologists":	"Gynaecologist"; "Hepatologist";
	"Gastroenterologists";	"Gastroenterologists"; "Gastroenterologist";
	"Pulmonologists";	"Hepatologists"; "Pulmonologists"; "Pulmonologist";
	"Cardiologists"	"Cardiologists"; "Cardiologist"; "Nephrologist";
		"Nephrologists"; "Otolaryngologist";
	"Nephrologists";	
	"Otolaryngologists";	"Primary Care Physician"; "Primary Care Physicians";
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		"ophthalmologist"; "ophthalmologists"; "Transplant
"Physicians, Primary Care";		surgeon"; "Transplant surgeons"; "Psychiatrist";
		"Revehiatrists", "Conoral Practitionars", "Conoral

Possible

relevant

specialisms

"Ophthalmologists";	Practitioner"; "General Practice Physician"; "General		
"General Practitioners":	Practice Physicians"; ""Nurse Practitioners"; "Nurse		
Nurse Practitioners";	Practitioner"; ""Physician Assistants"; "Physician		
	Assistant"; "Physicians' Extenders"; "Physician		
Physician Assistants";	Extenders"; "Physician's Extenders"; "Physicians'		
	Extender"; "Doctor's Assistants"; "Doctor		
	Assistants"; "Doctor's Assistant"; "Physicians'		
	Assistants"; "Physician's Assistants"; "Physicians		
	Assistants"; "Feldshers"; "Feldsher";		

NIDDM, non-insulin dependent-diabetes mellitus; T2D, type 2 diabetes; T2DM, type 2 diabetes mellitus.

Classic procentation and	Family history and	Other indicators from		
		medical history/medical	Lifestyle	Comorbidities
symptoms [1, 2]	congenital risk factors	assessments		
Polyuria	• Family history of T2D	Low socioeconomic	Smoking [19]	Metabolic syndrome
Polydipsia	[3, 4]	status [5, 10]	Lack of physical	[18, 21, 22]
Nocturia	• Small or large for		activity [20]	• Obesity [23, 24]
• Enuresis	gestational age [1, 4]	Blood test results		
Weight loss	• Exposed to diabetes	Abnormal lipid		
Growth impairment	when in utero [4-6]	profiles and related		
	• Ethnicity/race [5, 7-9]	enzymes [9, 11-16]		
		Abnormal glucose		
		levels [1, 17]		
		• Hyperinsulinism [7,		
		18]		

Table S2. Well-known indicators and symptoms of youth-onset T2D encountered in primary care

T2D, type 2 diabetes.

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