ACIL SERVISTE HIPOGLISEMI

MÜGE SÖNMEZ
ANEAH ACİL TIP KLİNİĞİ
BAŞASİSTANI

TANıM/EPIDEMIYOLOJI

Non-diyabetik

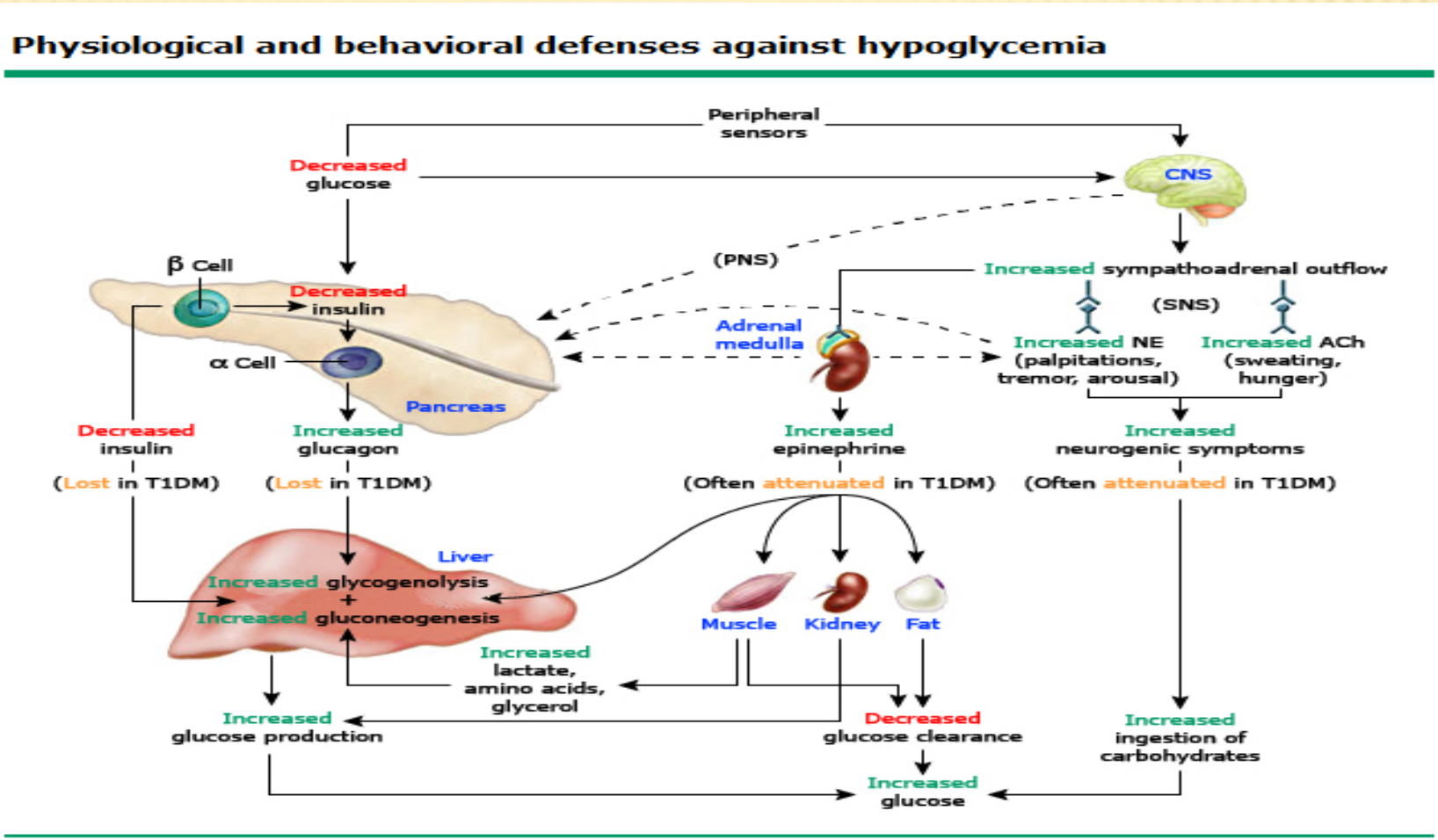
- Plazma [glukoz] ↔ semptom/bulgu

Diyabetik

- Plazma [glukoz]↓ epizodları± semptom/bulgu

- Plazma glukoz düzeyi !!!
  - <50mg/dl ♂, <45mg/dl ♀, <40mg/dl çocuk
- Tip 1DM>>Tip 2>> Tedavi almayan diyabetik

PATOFIZYOLOJI



Decrements in insulin and increments in glucagon are lost and increments in epinephrine and neurogenic symptoms are often attenuated in insulin-deficient - T1DM and advanced T2DM.

SNS: sympathetic nervous system; PNS: parasympathetic nervous system; NE: norepinephrine; ACh: acetylcholine; α-cell: pancreatic islet α-cells; β -cell: pancreatic islet β -cells.

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Counterregulatory response to hypoglycemia

Condition	Glucose	Insulin	Glucagon	Epinephrine
Nondiabetic	↓	Decreases	Increases	Increases
T1DM	↓	No Decrease*	No Increase*	Attenuated Increase*¶
T2DM				
Early	↓	Decreases	Increases	Increases
Late (Absolute endogenous insulin deficient)	↓	No Decrease*	No Increase*	Attenuated Increase*¶

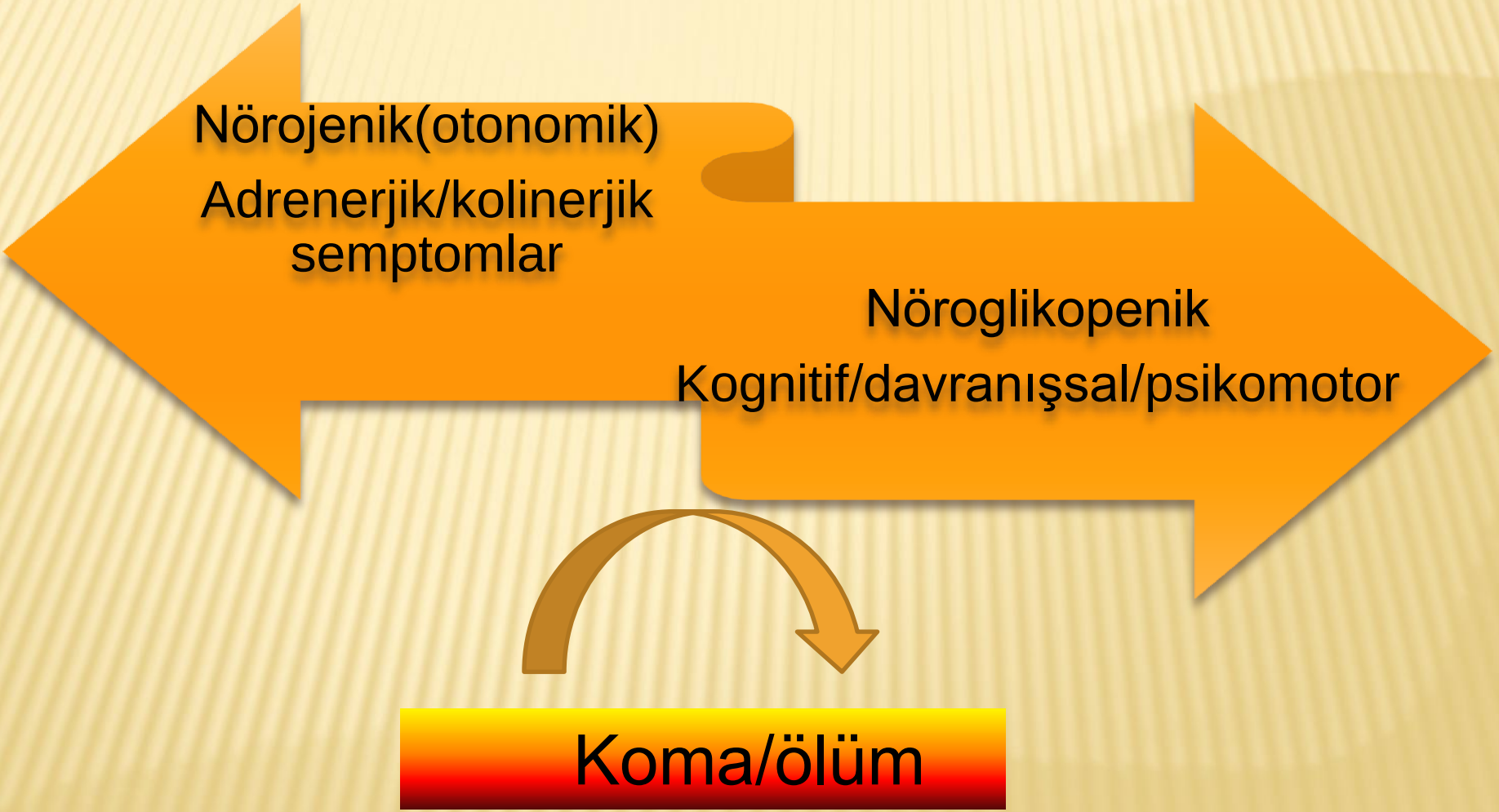
Iatrogenic hypoglycemia is the result of the interplay of absolute or relative therapeutic insulin excess and compromised physiological and behavioral defenses against falling plasma glucose concentrations in type 1 diabetes mellitus (T1DM) and advanced type 2 diabetes mellitus (T2DM).

* Defective glucose counterregulation.
¶ Hypoglycemia unawareness.

Courtesy of Dr. Philip Cryer.

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KLİNİK


Nörojenik(otonomik)
Adrenerjik/kolinerjik semptomlar
Nöroglikopenik
Kognitif/davranışsal/psikomotor
Koma/ölüm

TANI

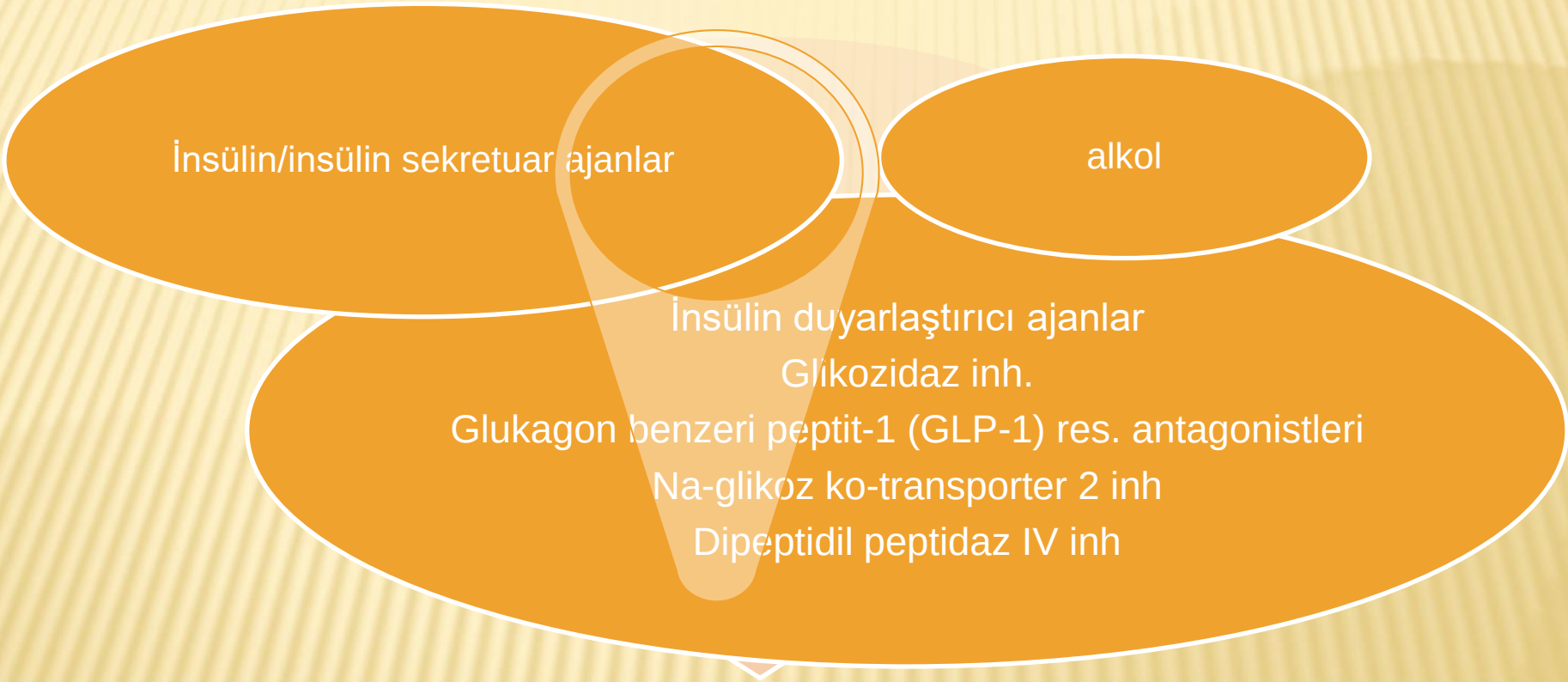
- Plazma glukoz düzeyi
  - Diyabetik/non-diyabetik (Whipple triyadı)
- Diğer olası nedenler

AYIRICI TANI

- Artifisiyel hipoglisemi
- Postprandiyal (reaktif) hipoglisemi
- Kardiyak hastalıklar
- İlaçlar
- Psikiyatrik hastalıklar
- Metabolik bzk

HIPOGLISEMI NEDENLERI

İlaçlar



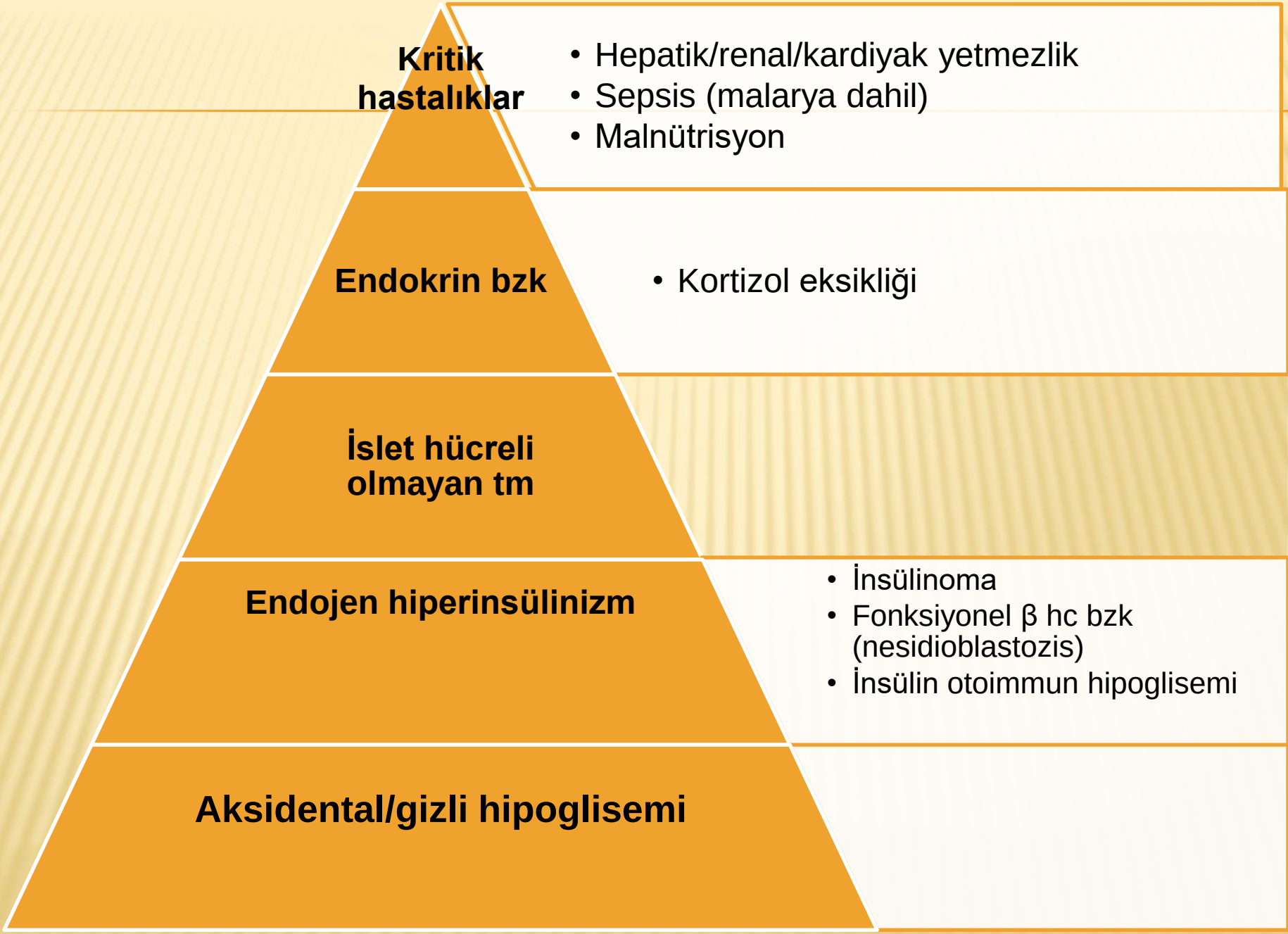
Diyabetik hst

Drugs other than antihyperglycemic agents and alcohol reported to cause hypoglycemia

Moderate quality of evidence
Cibenzoline
Gatifloxacin
Pentamidine
Quinine
Indomethacin
Glucagon (during endoscopy)
Low quality of evidence
Chloroquineoxaline sulfonamide
Artesunate/artemisin/artemether
IGF-I
Lithium
Propoxyphene/dextropropoxyphene
Very low quality of evidence
Drugs with >25 cases of hypoglycemia identified
Angiotensin converting enzyme inhibitors
Angiotensin receptor antagonists
Beta-adrenergic receptor antagonists
Levofloxacin
Mifepristone
Disopyramide
Trimethoprim-sulfamethoxazole
Heparin
6-mercaptopurine

Non-diyabetik

IGF-1: insulin-like growth factor 1.


Kritik hastalıklar
• Hepatik/renal/kardiyak yetmezlik
• Sepsis (malarya dahil)
• Malnütrisyon
Endokrin bzk
• Kortizol eksikliği
İslet hücreli olmayan tm
Endojen hiperinsülinizm
• İnsülinoma
• Fonksiyonel β hc bzk (nesidioblastozis)
• İnsülin otoimmun hipoglisemi
Aksidental/gizli hipoglisemi

TEDAVI VE YAKLAŞıM

ABC/ IV yol/O2/monitorizasyon/ parmak ucu KŞ

Glukoz replasman

Alert→PO

Bilinç bzk→1-3 ampul of %50 Dxt I [infant/çocuk)!!]

IM/SC/IV glukagon (1-2 mg)

[Alkole bağlı hipoglisemi]!!

β2 adrenerjik res agonisti formoterol

Aspirasyon/nöbet açısından önlem

- Altta yatan nedenin tdv
  - Sülfonilüre grubu oral hipoglisemik ajanlar
    - Tdv→Glukoz+ IV/SC octreotit (50-100 mcg)

      [Renal bzk/pediatrik/naif hst grubu!!!]
  - Diğer nedenler

HOSPITALIZASYON

- Neden?
- İlk atak
- Oral hipoglisemik ajan kullanımı
- Uzun etkili insülin
- Persistan nörolojik defisit varlığı

TABURCULUK

- Yüksek KH içerikli yemek
- Neden belli ve tdv alan
- Hızlı cevaplı hipoglisemik atak varlığı
- Altta yatan neden/atak karakteri

(şiddet-persistans-rekürrens)