



PKOS'da Güncel Durum Sempozyumu

22 Mayıs 2016, Pazar Saat: 13:00 - 20:00
Sheraton Ankara Hotel & Convention Center

PKOS ve Yaşam Tarzı Değişiklikleri

Dr. Gamze Sinem Çağlar
Ufuk Üniversitesi Tıp Fakültesi
Kadın Hast. ve Doğum ABD.

PCOS

- Reprodüktif problemler
 - Hirsutismus
 - İnfertilite
 - Gebelik komplikasyonları
- Metabolik komplikasyonlar
 - İnsulin rezistansı
 - Metabolik sendrom
 - Bozulmuş glukoz toleransı
 - Tip 2 DM
- Kardiovasküler hastalık risk faktörleri

PCOS-İnsulin resistansı



Exercise and Type 2 Diabetes

The American College of Sports Medicine and the American Diabetes Association: joint position statement

En az haftada 2.5 saat egzersiz ile

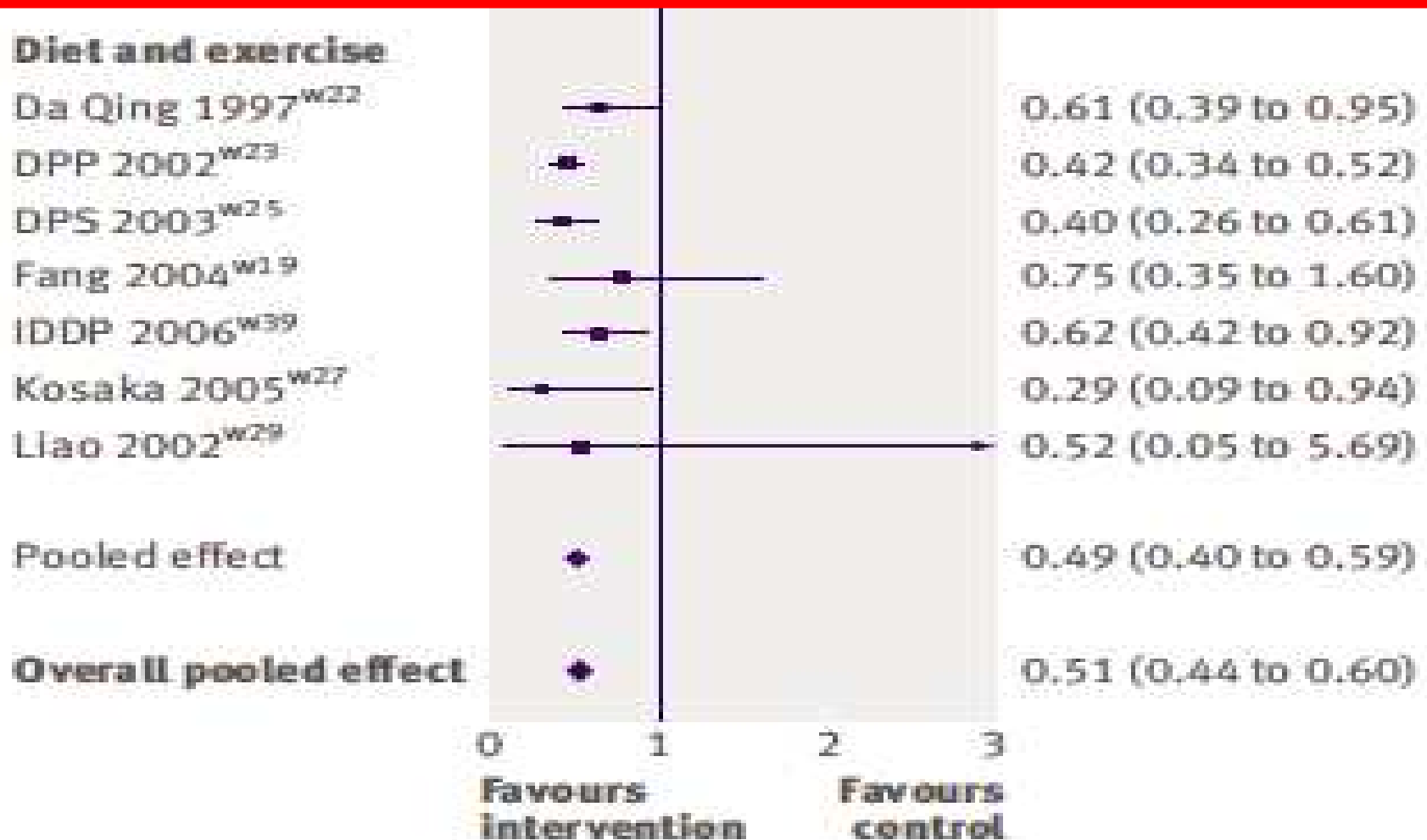
DM gelişimi geciktirilebilir veya önlenabilir.

Efficacy of Lifestyle Education to Prevent Type 2 Diabetes

A meta-analysis of randomized controlled trials

- 6 aydan uzun süreli diet ve diet+egzersiz uygulanan RKÇ n=8
- 1 yıl sonunda DM insidansında %50 azalma (RR 0.50 95% CI 0.44–0.69)

Pharmacological and lifestyle interventions to prevent or delay type 2 diabetes in people with impaired glucose tolerance: systematic review and meta-analysis



PCOS- Yaşam Tarzı Değişiklikleri

- **Pre-diabetik hastalarda** tip-2 DM gelişimini engellemek için (18, 19)
- **BMI >25 ve obez PCOS'da** adipositenin azaltılması, ovulatuvar fonksiyon, kardiovasküler riskin azaltılması

Düşük glisemik index diet:

- Tam tahıllı gıdalar,
- Kepekli gıdalar
- Doymamış yağlar
- Vitaminler
- Yeşil yapraklı sebzeler
- Taze meyveler
- Salata ve yeşillik
- 8-10 bardak su/gün
- Protein yüksek gıdalar: Baklagiller, kabuklu yemişler, badem, fasulye
- Yeşil çay



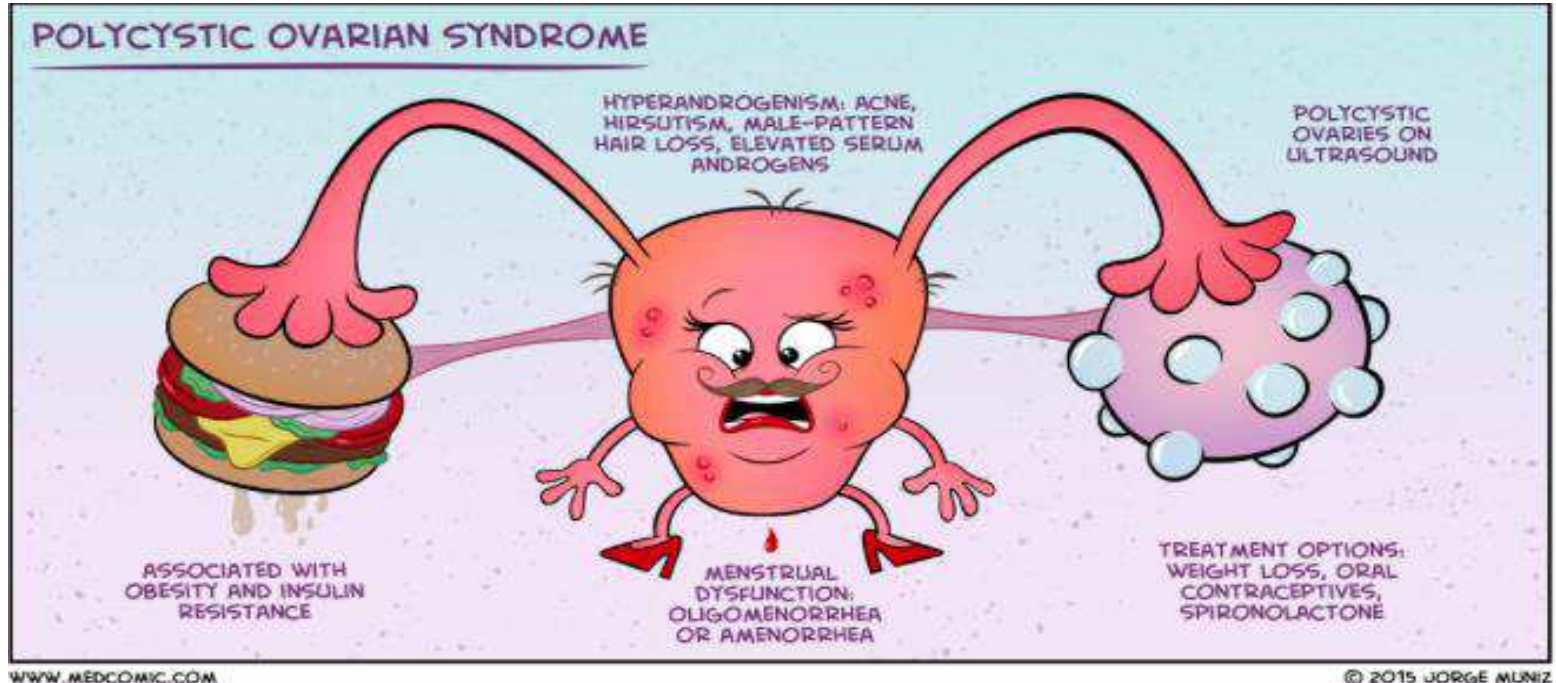
Treatment of obesity in polycystic ovary syndrome: a position statement of the Androgen Excess and Polycystic Ovary Syndrome Society

OBEZ PCOS:

- Diet + egzersiz
- 500-1000kcal/gün azalt
- 6-12 ayda kg %7-10 verilmeli
- Yağ oranı <%30
- Doymuş yağ oranı <%10
- >30 dak/gün egzersiz

Egzersiziz

- Haftada 5 gn
- En az 30 dakika
- Kardio ieren egzersiz



Treatment of obesity in polycystic ovary syndrome: a position statement of the Androgen Excess and Polycystic Ovary Syndrome Society

Diagnosis and Treatment of Polycystic Ovary Syndrome: An Endocrine Society Clinical Practice Guideline

- Metabolik komplikasyon tedavisinde
- Reprodüktif problemlerde

- Diet +egzersiz ile kardiovasküler risk faktörleri ve diabet riski kontrolü sağlanabilir.

Moran et al., 2009

Legro et al., 2013

Obstetric complications in women with polycystic ovary syndrome: a systematic review and meta-analysis

- Kardiak ve NTD anomalileri
- GDM OR 2.94, 95%CI: 1.70-5.08
- Preeclampsia OR 3.47 95% CI: 1.95-6.17
- Düşük, erken doğum OR 1.75; 95% CI: 1.16-2.62
- Artmış perinatal mortalite OR 3.07; 95% CI: 1.03-9.21

Consensus on infertility treatment related to polycystic ovary syndrome

The Thessaloniki ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group March 2–3, 2007, Thessaloniki, Greece*

Treatment of infertility in women with polycystic ovary syndrome: approach to clinical practice

- İlk basamak tedavi:

İnfertil obez PCOS:

YAŞAM TARZI DEĞİŞİKLİKLERİ

Improvement in endocrine and ovarian function during dietary treatment of obese women with polycystic ovary syndrome

1000 kcal, düşük yağlı diet ile 6 ayda %5 kilo kaybı (n=24):

- Menstruel siklusta düzelme
- Reprodüktif fonksiyonlarda düzelme

Weight loss results in significant improvement in pregnancy and ovulation rates in anovulatory obese women

Overweight anovulatory PCOS, 6 ay egzersiz ve diet:

- 12/13 hasta ovulasyon
- 11/13 hasta gebe

PCOS-Diet

Intervention çalışmaları (n=21) - sadece diet:

- Hasta sayısı 6-143
- Takip 1 hafta- 1 yıl
- Kilo %5-%15

- Androjenler azalır.
- SHBG artar.
- Açlık insulin, glukoz azalır.
- Menstruel ve ovulatuvar fonk. düzelme

PCOS- Diet vs Egzersiz

- Prospektif- kontrollü çalışma
- 40 hasta
- BMI: 33 kg/m²

- **Egzersiz:** SHBG artışı fazla
FAI ve HOMA düşer

- **Diet:** Kilo kaybı daha fazla,
Adrenal androgen düşüşü

Lifestyle Modification Programs in Polycystic Ovary Syndrome: Systematic Review and Meta-Analysis

- 610 hasta
- Ort. Yaş: 27 (18-35),
- Takip süresi 5 (1.5-11) ay
- 5 RKÇ :Obez
- 4 RKÇ:Overweight

Lifestyle Modification Programs in Polycystic Ovary Syndrome: Systematic Review and Meta-Analysis

- Hypokalorik diet (1 RÇT)
- Fiziksel egzersiz (3 RÇT)
- Hypokalorik diet ve Fiziksel egzersiz (5 RÇT)

Lifestyle Modification Programs in Polycystic Ovary Syndrome: Systematic Review and Meta-Analysis

Life style Intervention vs. Minimal intervention

Outcome: Fasting Blood Insulin

Study name

Difference in means and 95% CI

Guzick, 1994

Hoeger, 2008

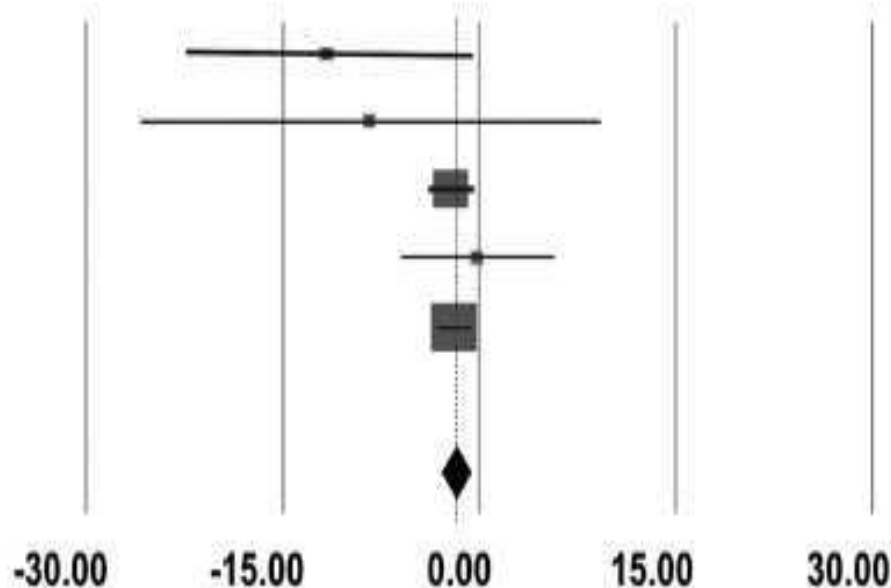
Palomba, 2010

Sterner-Victorin, 2009

Vigorito, 2007

Fixed Effect Model

$I^2 = 0\%$



MD	Lower	Upper	p
-11.7	-22.6	-0.8	0.04
-8.4	-26.1	9.3	0.35
-2.2	-4.1	-0.4	0.02
-0.2	-6.2	5.8	0.95
-2.0	-3.4	-0.6	0.01
-2.1	-3.3	-1.0	<0.01

Lifestyle changes in women with polycystic ovary syndrome



- 6 çalışma
- Hiperandrogenizm
- İnsulin resistansı düzelir.
-

The PCOS 'Rules'



Drink plenty of water...make every effort to drink 6-8 glasses of water a day - you will notice the impact of this and a significant difference once you get into this habit!



Make sure you get the right vitamins and minerals! Try to ensure your diet is filled with all essential vitamins and minerals



If you struggle to have a truly varied diet try vitamin supplements to help ensure your body has what it needs to function!

Do what you can to reduce stress - stress will play havoc on your PCOS affecting your body, skin and emotional state in the most unpleasant ways.

Chill out, try aromatherapy, yoga, kickboxing, grab a cup of tea - whatever floats your boat and helps you relax...your body will thank you!



Make sure you get enough sleep...

It is important to try and get the best quality sleep you can.

Most people need to sleep for 6-8 hours a night for their bodies to function properly.



Exercise is fundamental to any healthy lifestyle and for PCOS it is so much more important.

Regular exercise will help keep some of your symptoms in check, reduce stress and help with weight loss.

Find something you enjoy and go for it!

Yaşam Tarzı Değişiklikleri + ?

OBEZ PCOS:

- Farmakolojik tedavi
- Bariatrik cerrahi

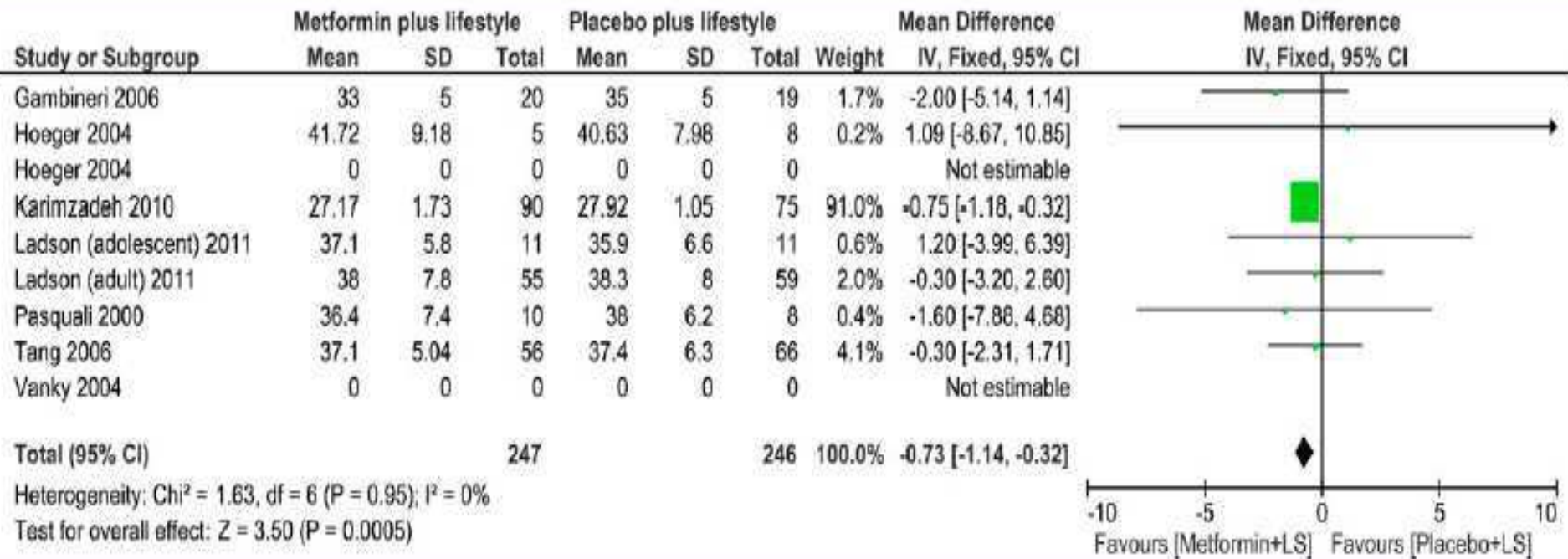
Use of insulin-sensitizing agents in the treatment of polycystic ovary syndrome

Practice Committee of the American Society for Reproductive Medicine

- İnsülin resistansı varsa
- Diet ve egzersiz ile düzelme yoksa

METFORMİN eklenmelidir.

Metformin and lifestyle modification in polycystic ovary syndrome: systematic review and meta-analysis



Yaşam Tarzı Değişiklikleri + Farmakolojik Tedavi

- **Orlistat,**
- Sibutramine,
- Rimonabant

Lifestyle intervention and anti-obesity therapies in the polycystic ovary syndrome: impact on metabolism and fertility

Yaşam Tarzı Değişiklikleri + Bariatrik Cerrahi

- Hirsutism,
- Hyperandrogenism,
- Menstrual düzensizlikler
- Anovulasyon
- Insulin resistance
- Metabolik anormallikler düzelir.

Escobar-Morreale et al., 2005

Eid et al., 2005

PCOS-BMI<25

- İzokalorik diet ve egzersiz: Kilo kontrolü, reproduktif problemler

Panidis et al., 2013

- Visceral yağlanma ve IR: Metabolik problemler

Herriot et al., 2008

Sonuçlar

- Egzersiz
- Yeme alışkanlıklarının düzenlenmesi
- Overweight/Obez PCOS: Hipokalorik diet
- DM+: Metformin
- BMI>35 +DM: Orlistat
- BMI>40: Bariatrik cerrahi

Teşekkürler...

DON'T

QUIT...



I'm so classy even my ovaries wear a string of pearls.

-PCOS-



*Atatürk'ü Anma
Gençlik ve Spor Bayramımız
Kutlu Olsun*

