EP-191. The PCOS Demographic in a Dedicated University Clinic.

Maeve C Durkan[1], Bernard Kennedy[2]

[1]Galway University Hospital Group, Galway, Ireland. Potential conflict of interest may exist. Refer to the abstract. . [2] NUI Galway.

Introduction

This is a retrospective review of all adult women referred to a dedicated University clinic for presumed Polycystic Ovarian Syndrome.
The aims of our study were to determine (1) the true PCOS prevalence and (2) to evaluate baseline demographics by diagnostic criteria and their relationship to metabolic & Cardiovascular risk parameters

Methods

All charts were reviewed.
All other endocrinopathies were excluded.
The Diagnosis was based on any 2 of the following 3; oligomenorrhoea, hyperandrogenism, and/or polycystic ovaries, as per the 2003 Rotterdam Consensus statement.
The cohort was divided into 3 groups based on their inclusion criteria (Fig 1)
- Group 1; Oligomenorrhoea and Hyper androgenism
- Group 2; oligomenorrhoea and polycystic Ovaries
- Group 3; Hyperandrogenism and Polycystic Ovaries

We also reviewed coexistent hypertension, dyslipidemia, dysglycaemia, metabolic syndrome (MetS) & NAFLD in the proven PCOS cohort.

Results

250 women were referred with a presumed diagnosis of PCOS.
134 (54%) had confirmed PCOS.
116 (46%) had a different diagnosis, inclusive of ectopic Cushings, prolactinoma, nonclassical CAH, PIH, POF ,Hypothalamic & obesity driven oligomenorrhoea.
120 patients met Group 1 criteria, 6 met Group 2 criteria ,4 met Group 3 criteria and only 14 patients met all three. (Fig 1)
Hypertension was more prevalent in Group 1 (20/120) vs Group 2 (0/6) vs Group 3 (0/4).
Of 60 women with a BMI > 35 , 13 had hypertension & 11 had MetS, compared to 5/38 lean women with hypertension.
124/134 PCOS women had hyperandrogenism; either biochemically alone (8) or phenotypically alone (4) but most (113) having both .
The mean BMI of the PCOS cohort was 31 (Sd 8.34), 30% were lean and of Normal weight, 22% were Overweight and 48% were Obese.
The mean systolic BP 124.78 (Sd 15.8) & the mean diastolic BP was 75.46 (Sd 9.4) .
The Mean age was 27.74 years (Sd 6.7 years) .
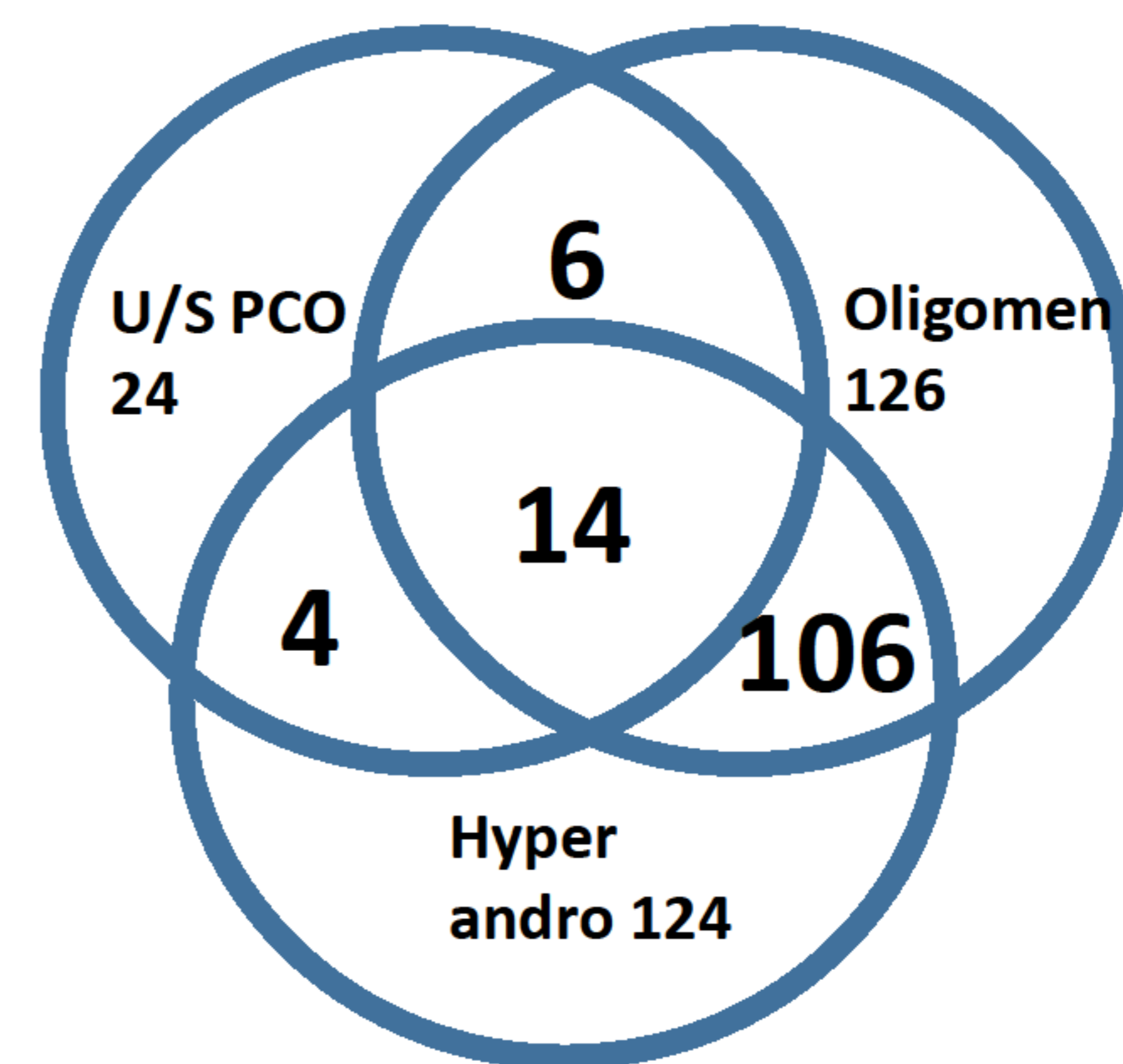2.5% had pre-diagnosed DM2 and 1 patient was diagnosed at presentation.

Fig1; Diagnostic Criteria, Numbers of Patients

	oligomenorrhea hyperandrogenism (I)	oligomenenorrhoea and polycystic ovaries (II)	Hyper-androgenism and polycystic ovaries. (III)
Patients	120	6	4
HTN	16	0	0
BMI	31.42+-8.28	25.52 +- 5.59	33.89+-14.77
↑TGs	18	1	0
↓HDL	30	1	1
Met S	10	1	0

Fig2; Metabolic Parameters of PCOS groups

Conclusions

90% were diagnosed with Group 1 criteria alone, ie oligomenorrhoea & hyperandrogenism.
The presence of Comorbidities were higher in Groups I & III, and they also had a wider BMI ranges (Fig 2). This raises the question of a relationship to hyperandrogenism and an association to Cardiovascular risk phenotype.
In keeping with the international literature, this cohort has the greatest metabolic risk, mandating focused risk assessment & intervention.
Our data is weakened by sporadic metabolic testing but nonetheless supports new guidelines recommending this.
It is striking that 30% of proven PCOS patients have a normal BMI.
Our results reiterate the principle of PCOS as a diagnosis of exclusion with almost 50% having a different underlying diagnosis.