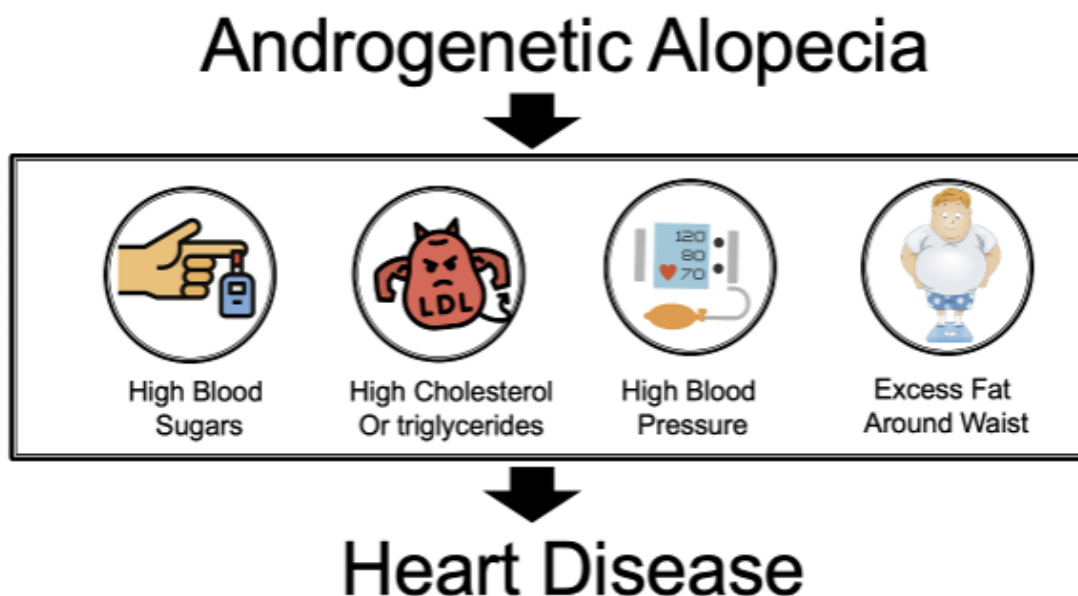


Androgenetic Alopecia: A Closer Look at the Heart Disease that Goes Along with it

Evidence Points to an Approximately Three Fold increased Risk of “Metabolic Syndrome” for Patients with Androgenetic Alopecia

“**Metabolic syndrome**” is a term that refers to the group of abnormalities that increase the risk for cardiovascular disease. When you say that a patient has “metabolic syndrome” you are saying that they have one or more of issues such as high blood sugars, high cholesterol, high blood pressure and central obesity. It’s been clear for many years that patients with androgenetic alopecia are at increased risk for metabolic syndrome.



To date, there have been several studies teaching us that patients with androgenetic alopecia are at risk for metabolic syndrome. In fact, studies go back to 1972 when a landmark study by Cotton and colleagues published in the British Heart Journal showed that males with balding had an increased risk of heart disease. So we’ve realized for some time that hair loss is associated with heart disease!

Are patients with androgenetic alopecia at risk for metabolic syndrome?

Three meta-analyses in the past showed that patients with androgenetic alopecia are at risk for metabolic syndrome. This includes nice studies by Wu and colleagues in 2014, Caro-Chang and colleagues in 2019 and Qui and colleagues in 2022. The study by Wu et al showed that patients with AGA had a 2.70 fold increased risk, and the study by Caro-Chang et al showed the risk was 2.59 fold. A recent study by Qui et al put the risk at 3.46 fold.

Wu et al, 2014	↑ 2.70
Caro-Chang et al, 2019	↑ 2.59
Qui et al, 2022	↑ 3.46

Conclusion and Comments

In conclusion, it's quite clear that our patients with androgenetic alopecia are at risk for heart disease. Studies have showed that risks seem even greater in our female patients who are experiencing androgenetic alopecia than our male patients and greater in specific groups such as early onset AGA and patients with African and Asian ethnicity.

“Metabolic syndrome” is a nice term. But it's a bit of a “euphemism.” In the English language, a euphemism is a word or term that is used to soften a harsher term. For example, instead of saying someone is sick, we might say he or she is ‘under the weather.’ Instead of saying a care is ‘used’ we say that a car is ‘pre-owned.’

In my opinion, the term metabolic syndrome is sort of like a euphemism. When we learn that AGA is associated with an increased risk of ‘metabolic syndrome’ we don't tend to do very much about it! If we were to say that our patients with AGA are more likely to die early from heart attacks and strokes, perhaps we'd be more worried.

Overall, these studies are such an important reminder that we need to be talking about risks for metabolic syndrome in our patients with AGA. We need to make sure blood pressure gets measured in all our patients with AGA, screening for diabetes and insulin resistance gets done and that weight is measured often and patients are encouraged to keep weight in a healthy range.

My Own Guidelines for Monitoring the Patient with AGA

We do not yet have screening guidelines in the world for how best to monitor males and females with AGA. We now know with great confidence that males and females with androgenetic alopecia have an increased risk of developing metabolic syndrome and

cardiovascular disease later in life. There's just no doubt! I feel strongly that our medical community has neglected this issue but nevertheless I have guidelines in my clinic that we feel are appropriate first steps. In my clinic, I recommend the following:

1. Encouragement of healthy eating and diets rich in antioxidant rich fruits and vegetables.
2. Encouragement of active lifestyles with 150-300 minutes of moderate physical exercise weekly (or 75-150 minutes of more vigorous aerobic activity).
3. Smoking cessation strategies for all smokers and encouragement to not begin smoking.
4. Blood pressure measurements at baseline and then every 2-3 years by the family physician. Encourage of home monitoring in those with borderline measurements. Treatment of hypertension with lifestyle and pharmacological means as recommended by current evidence based guidelines.
5. Measurement of cholesterol levels at baseline and then every 3-5 years if normal at baseline. Treatment of abnormal cholesterol level according to current evidence based guidelines.
6. Fasting glucose insulin and hemoglobin A1c levels at baseline and every 3-5 years if normal at baseline. Consideration of further tests for insulin resistance as appropriate.
7. Weight and height measurements yearly and evidence based weight reduction strategies if weight is found to be in the overweight or obese ranges.

Are we not ready yet as a medical community to make this the standard of care? We are now approaching 50 years since a link between heart disease and hair loss was first uncovered. It's about time.

REFERENCES

Caro-Chang et al. Androgenetic alopecia and its association with metabolic syndrome: a systematic review and meta-analysis. *Acta Medica Philippina* 2019; 53: 122–131.

Qui Y et al. Systematic Review and Meta-analysis of the Association Between Metabolic Syndrome and Androgenetic Alopecia. *Acta Derm Venereol.* 2022 Feb 8;102:adv00645

Wu D-x, Wu L-f, Yang Z-x. [Association between androgenetic alopecia and metabolic syndrome: a meta-analysis]. *Zhejiang Da Xue Xue Bao Yi Xue Ban* 2014; 43: 597–601 (in Chinese)