

1. Errors in **use of English**

Grammar, syntax (but nothing so serious that it makes the text hard to understand)

2. **Technical editing**, copyediting and proofreading errors

Don't assume the journal will do good copyediting for you to achieve "good scientific English style."

3. Errors in **writing** (logical connection between ideas or topics, transition between paragraphs, statements made with confidence versus suggested explanations for readers to consider)

Introduction and Discussion more likely to have writing problems than Methods and Results

4. Errors in **scientific thinking** (reporting errors, overgeneralization, conclusions not based on data reported, confusion, insufficient knowledge of the subject)

Questions about statistical analysis

Inconsistent reporting of P values

Conclusions not based on data in this study

Data for one group borrowed from a previous publication

Conclusion: Fatal flaws in thinking and reporting, possible problems with the data and statistical analysis, inadequate editing (discrepancias between info in the Abstract and the text, a large part of the data taken from another study, ie, the content is not entirely original).

Who does the publication of articles like this benefit? Even if it leads to academic promotion, does it actually help patients?

Who is responsible for fixing style, grammar, writing and scientific errors? The authors should be prepared to accept responsibility for and take steps to avoid all types of errors, not just scientific errors.

Comparison of the extent, severity and risk factors in middle-aged women from Jupiter and Saturn: Ethnic gap in coronary artery disease

ABSTRACT

1. The authors **examined** [compared] risk factors and [the] **extent** [severity] of coronary artery disease (CAD) **among** [between] Saturnian and Jupiterian women in Cloudy Plains, where Jupiterian women were found to have [a] **worse outcome** [more unfavorable profile? a higher risk of CAD?]

All angiographically confirmed cases of CAD among women aged 45 to 65 years who were hospitalized during 1990 to 1995 consisted of 40 Jupiterian and 179 Saturnian patients.

The participants were a total of **40** Jupiterian and **179** Saturnian women aged 45 to 65 years with angiographically confirmed CAD who were hospitalized during 1990 to 1995.

2. Jupiterian women had more atypical clinical presentations (**P**<.0001) and more **extensive** [severe] CAD (**P**=.0016) despite [their] [**younger**] age (53±3 vs 55±5 years;

$P < .0003$) and lesser [lower frequency / prevalence of] smoking ($P < .0006$). [not in main text]

In Jupiterian women atypical clinical presentation was more frequent and CAD was more severe despite their younger age [Was the difference really significant?] and lower frequency / prevalence of smoking.

3. The Jupiterian women, however, [in addition,] were more likely to be obese (80% vs 46%; $P = .0002$), [not in main text] [to] be physically inactive (100% vs 89%; $P = .0285$), [not in main text] and [to] have diabetes mellitus (73% vs 40%; $P = .0004$).

4. Moreover, they were more likely to have 3 or more risk factors (45% vs 23%; $P = .036$). [not in main text] Thus, a combination of atypical presentation and higher risk (ie, diabetes mellitus combined with hypertension and other risk factors) and much [not needed] more extensive [severe] disease readily [probably] explains their worse outcome. [more unfavorable profile? Outcomes (results of treatment, follow-up, prognosis) were not reported or discussed in this article.]

ARTICLE TEXT

Coronary artery disease (CAD) is the leading cause of death in postmenopausal women in the United States, [United States of America / USA] accounting for nearly 50% of all deaths,¹ as it is in Saturn and many other countries. Approximately twice as many women [in what population or geographical setting?] die of cardiovascular disease than [as] of cancer.¹

To consider the possibility of CAD in older women with multiple risk factors and typical chest pain is the rule, whereas CAD is less likely to be considered when encountering younger women with atypical clinical presentations, and the possibility of CAD is all too frequently overlooked.

In women with atypical clinical presentations, the possibility of CAD is normally considered in older women with multiple risk factors, whereas it is less likely to be considered in younger women, in whom the possibility of CAD is all too frequently overlooked.

In our emergency and internal medicine departments, it is not uncommon for a Jupiterian woman to present with atypical symptoms and be found [not needed] to have extensive CAD. Indeed, it was observed that in Cloudy Plains, CAD mortality rates of [in] Jupiterian women are higher not only than that of [in] Saturnian women but even [also] than that of [in] Saturnian men.^{5,6} There is also evidence from the Secondary Prevention Reinfarction Saturnian Nifedipine Trial (SPRSNT) that among survivors of myocardial infarction (MI), the long-term prognosis in Jupiterian women is much worse than that of [in] their Saturnian counterparts.⁷ Similarly, mortality from stroke, another atherosclerotic disease, is also remarkably [Is this really so surprising? The readers don't have enough information about these mortality rates to share the authors' surprise.] declining less in Jupiterian than in Saturnian persons, particularly in women.⁸

According to findings from the Framingham Study, identifiable risk factors have the strongest predictive value in middle-aged women.^{9,10} The prevalence and extent of well-recognized coronary risk factors such as hypertension, diabetes mellitus, dyslipidemia, cigarette smoking, a family history of premature disease, and lifestyle characteristics may differ between the [not needed] populations and explain different outcomes. [risk profiles? risks of CAD?]

The purpose of this study was to **characterize CAD and its risk factors** among middle-aged Jupiterian and Saturnian women residing in the same area. **This** [Information about possible differences between these populations] could enable us to better identify women at risk for CAD **and ultimately develop a multidisciplinary preventive strategy.** [Nothing in the Introduction suggests evidence that increased knowledge of CAD risk will allow researchers to develop “multidisciplinary” preventive strategies. ALT: and ultimately develop more effective preventive strategies **for younger women in whom CAD may be overlooked.**]

Patients and Methods

The study population consisted of **female patients** [women] aged 45 to 65 years and residing in Cloudy Plains who were hospitalized in Saturn Ring University Hospitals (both Outer Ring and Cloudy Plains campuses) during the years 1990 to 1995, with a diagnosis of angiographically confirmed CAD. The study population **included** [comprised / consisted of] **179** Saturnian and **40** Jupiterian women. All but 2 of the Saturnian women were admitted for acute coronary syndrome; about 80% were admitted for MI. **Angiography was decided upon by the clinical judgment of the attending physicians.** [The decision to use angiography was made by the attending physician based on his or her clinical judgment.] Data regarding medical background, **outcomes** [findings] of coronary angiography, the performance and **outcomes** [findings] of percutaneous transluminal coronary angioplasty (PTCA) and coronary artery bypass grafting (CABG), and previous angiography or other previous procedures were available for **the** [both] study groups. [But the **outcomes** of treatment are not reported or discussed in this paper.] All angiographic findings were evaluated by experienced attending physicians, who also made the decision, **when necessary, about PTCA** [decision to use PTCA when necessary.]. In cases in which PTCA was not feasible or was judged inferior to CABG, the latter form of revascularization was **decided** [chosen] **together** [in consultation with] with attending cardiac surgeons. The **severity** of CAD was assessed by analyzing the data **derived** [jargon, fashion] from coronary angiography, according to the following criteria: (1) the number of main coronary arteries with stenosis of 80% or more (**the 80% occlusion cutoff was chosen to enable us to compare the results of our previous study**)¹¹; (2) the number of arteries that underwent PTCA; and (3) the number of arteries that underwent CABG, as **described** [reported] previously.¹¹ Women with less than 80% stenosis were considered **as having** [to have] nonsignificant CAD.

Data on blood pressure, diabetes, lipids, weight, and physical activity were retrieved from **medical records of participants under examination.** [the participants' medical records.] Data for the Saturnian women were obtained from our previous study about a **sex gap in Cloudy Plains during the same period.**¹¹

The **2** [two] groups were compared with respect to discrete variables **by** [with] **a** [the] chi-squared test. Fisher's exact test was **employed** [used] **in cases of small numbers.** [when the number of data was small.] **Two-tailed $P < .05$** [A value of $P < .05$ in the two-tailed test] was considered significant. **??Statistical review needed??**

Results

The study group **included** [comprised] 179 Saturnian women aged 55 ± 5 years and 40 Jupiterian women aged 53 ± 3 years (**$P < .0003$**). [If the difference in age between groups was significant, can the two groups really be compared? Is the difference really statistically significant?] The **clinical presentation of CAD** [ALT: clinical features of CAD on presentation] differed between **the** [not needed] Jupiterian and Saturnian women. Atypical chest pain and dyspnea were reported in 70% of **the** [not needed]

Jupiterian women and 31% of Saturnian women ($P<.0001$); the odds ratio (OR) for typical chest pain in the [not needed] Jupiterian women was 0.18, with a 95% confidence interval (CI) of 0.09 to 0.39. However, no significant differences were [difference was] found regarding the presence of MI at presentation: 82% of the Jupiterian vs 77% of the Saturnian women had experienced such an [this] event ($P=1.00$).

All patients underwent coronary angiography. No differences were found with regard to [the frequency of] revascularization procedures such as [not needed] PTCA and CABG; PTCA was performed [done] in 57.5% of the Jupiterian patients and 62.5% of the Saturnian patients, and CABG was performed [done] in 37.5% of the Jupiterian patients and 32.5% of the Saturnian patients. [This information should be reflected in Table I.] Overall, revascularization procedures were performed [done] in about 95% of the patients in both groups. No difference was observed between the groups regarding the number of coronary arteries that underwent PTCA. Saturnian and Jupiterian women did not differ in PTCA [differ in the frequency of use of PTCA] for multiple arteries (43% vs 30%; $P=.4$); Jupiterian women were more likely to have CABG for double- or even single-vessel disease, whereas most Saturnian women had multiple-vessel bypass ($P=.022$; Table I). [P value is inconsistent with Table I.] Twenty-five percent of Saturnian women had nonsignificant coronary artery stenosis, while [whereas] only 5% of their Jupiterian counterparts had such a result [whereas this result was found in only 5% of] ($P=.0047$). The OR for nonsignificant coronary artery stenosis among the [not needed] Jupiterian women was 0.16, 95% CI, 0.04 to 0.68. [0.04–0.68]. Multivessel disease (≥ 2 arteries with significant stenosis) was twice as common among the [not needed] Jupiterian women (62.5%) than [as] in the [not needed] Saturnian women (33%; OR for multivessel disease among the [not needed] Jupiterian women, 3.2; 95% CI, 1.58–6.56; $P=.0016$).

Table I. Extent and revascularization of coronary artery disease in 40 Jupiterian and 179 Saturnian women catheterized because of suspected ischemic event [Inclusion criterion reported in the text as “with a diagnosis of angiographically confirmed CAD”]

	Jupiterian	(%)	Saturnian	(%)
No. of vessels with stenosis $\geq 80\%$				
0	2	5	45	25 ^a
1	13	32	45	32
2	18	45	32	18
≥ 3	7	18	29	16
	47	103	151	91
PTCA				
1	16	69	64	57
2	6	26	38	34
≥ 3	1	4	10	9
	23	99	112	100
CABG				
1	1	7	0	0
2	4	27	5	9
≥ 3	10	67	52	91 ^b

15

101

57

100

^a $P=.022$; ^b $P=.00047$. [P value is inconsistent with text] Abbreviations: CABG, coronary artery bypass grafting; PTCA, percutaneous transluminal [coronary] angioplasty

Jupiterian women with CAD had a significantly higher prevalence of multiple risk factors (45% vs 23%; $P=.0094$) (Table II). Diabetes mellitus was more prevalent as well (72.5% [reported in Table II as 73%, rounding should be explained in a footnote to the table.] [vs 40%; $P<.0004$; OR, 3.9; 95% CI, 1.8–8.3), but no significant difference was noted in hypertension and [or] hypercholesterolemia. It was found, however, that the combination of diabetes and hypertension [It would have been useful to include a line for this in Table II.] affected more Jupiterian (65%) than Saturnian women (40%) in the study group (OR 2.76; 95% CI, 1.35–5.64; $P=.0075$). A significant difference in lifestyle was found between the 2 [two] groups. Obesity [Reported in Table II as Overweight; the terms are not synonymous] was more common among Jupiterian women (80% vs 46%; OR, 4.7; 95% CI, 2.1–10.8 [P value missing in text]). Physical inactivity was prevalent in both groups; however, it was universal among the Jupiterian women (100% vs 89%; OR, 10.4; 95% CI, 0.61–175.9; $P<.03$). [Reported in the text as .0289] On the other hand, the prevalence of cigarette smoking was much lower among the Jupiterian women (18% vs 46%; OR, 0.25; 95% CI, 0.10–0.60; $P=.001$).

Table II. Risk factors for coronary disease and lifestyle characteristics among the study population [in 40 Jupiterian and 179 Saturnian women with CAD]

Risk factor	Jupiterian	(%)	Saturnian	(%)
Diabetes mellitus	29	73	72	40 ^a
Hypertension	28	70	113	63
Hyperlipidemia	28	70	146	82
No. of risk factors				
0	3	7	13	7
1	9	22	53	39
2	10	25	72	40
3	18	45	41	23 ^b
	40	99	179	109
Lifestyle characteristics	40	100	143	80
Smoking	7	7	66	46 ^a
Overweight	32	80	66	46 ^a
Physically inactive	40	100	128	89 ^c

^a $P<.001$; ^b $P=.0094$; ^c $P=.0289$. [Reported in the text as .03]

Discussion

Our data indicate that women in Cloudy Plains aged 45 to 65 years with angiographically proven CAD have [had] marked differences in presentation, severity of CAD, underlying risk factors, and lifestyle characteristics based on [related with] their ethnic background. [Same paragraph]

The Jupiterian women, though significantly younger and much less likely to smoke, had much more extensive [more severe] CAD: They had tripled ORs for having multiple vessel disease and one-seventh the OR for normal coronary angiography [Compared to

Saturnian women?). [their OR for multiple vessel disease was threefold as high as in Saturnian women, and their OR for normal findings on coronary angiography was one seventh that of Saturnian women.] [Both writing and thinking: the sentence is hard to understand, and the CI for Saturnian women are not stated in the Results, so the reader cannot judge how different the CIs for the two groups are.] Their severe disease relative to that of the [The greater severity of their disease compared to] Saturnian women can also be inferred from their having surgical revascularization for only 2-vessel and even single-vessel disease, and being less likely to have [their lower likelihood of having] percutaneous revascularization for multiple vessel disease; [.] [T]his reflects the extent of CAD beyond angioplasty, [greater severity of CAD not amenable to angioplasty] with limited surgical revascularization possibilities. [and the limited potential for success of surgical revascularization.]

Diabetes mellitus was a key risk factor in both the [not needed] Jupiterian and Saturnian women (as in other populations of women with CAD)¹²⁻¹⁵; [;] however, the rate [prevalence] / [frequency] of diabetes mellitus in Jupiterian women was double that of the [not needed] Saturnian women [in our sample]. The [not needed] Jupiterian women were more likely to be obese and physically inactive. On [Against] this background, it is not surprising that they were more likely to have had [have] multiple risk factors, with a 3-fold increase in [a three-fold higher prevalence / frequency of] the [not needed] concurrent incidence of [not needed] diabetes mellitus and hypertension. The combination of diabetes and hypertension was found in multiple studies to be particularly ominous from a cardiovascular standpoint.^{16,17} This combination is indeed one of the broader bases [most common causes] of the cardiometabolic syndrome; it [syndrome, which] includes metabolic abnormalities such as hyperglycemia and the effects of advanced glycosylation products, a worse lipid profile, and renal dysfunction. It also includes a hemodynamic abnormality, [abnormalities] such as endothelial dysfunction, as well as coagulation abnormalities. Cellular and tissue abnormalities such as increased intracellular calcium, increased expression of the renin-angiotensin axis, [and above-normal concentrations of] matrix metalloproteinases, adhesion molecules, and reactive oxygen species are frequently present, as well as a myriad of [myriad] other properties, all of which act in concert to enhance [exacerbate] coronary atherosclerosis and manifested [manifest] coronary disease.^{18,19}

Women are known to have atypical presentation of coronary events (relative to men),²⁻⁵ [Among patients with CAD, atypical presentations are known to be more frequent in women than in men,] and this was also true for the [not needed] Saturnian women in Cloudy Plains¹¹; however, the [not needed] Jupiterian women in Cloudy Plains were less likely to have a typical presentation compared with [atypical presentation was less likely in Jupiterian women in Cloudy Plains than in the [not needed] Saturnian women. The reason for this is not clear, but it was [differences in the frequency of atypical presentation were] also found among [between] other minority groups of women.³ It could [The differences may] be related to other differences in reporting disease [*meaning unclear*] between Jupiterian and Andromedan women, such as smoking and subjective health perception.^{20,21} There is also a possibility of language nuance problems, although probably only marginally [this factor probably had only a marginal influence] because [the availability of] Jupiterian-speaking physicians and available interpreters must have [probably / may have] minimized such a [this] problem.

Therefore, we [clinicians in Saturn] face, in practice, the combination of greater risk with [and] atypical presentation for diagnosing CAD [when a diagnosis of CAD is considered] in Jupiterian women. The clues, therefore, [not needed] rest [lie] in the

appreciation of risk **mostly on the basis of** [based mostly on] a multiplicity of risk factors, prominent among which **should be** [are] diabetes mellitus, **a common outcome of** [*meaning unclear*] **obesity** [overweight?] and physical inactivity.

Why **should** [do] Jupiterian women in Cloudy Plains have more risk factors than Saturnian women? It is known from population surveys in Saturn that Jupiterian citizens [, especially women,] are more likely to be **obese**, **and women even more so than men.**²² Another relevant finding from [a] population survey[s] is that the least physically active population segment is Jupiterian women.²³ Although physical inactivity and obesity are closely related, there is evidence from an angiography-based study targeted at women that **physical fitness (self-reported)** [self-reported physical fitness] was associated with fewer CAD risk factors, milder angiographic CAD, and fewer adverse cardiovascular events.²⁴ Whether obesity, physical inactivity, diabetes mellitus, CAD complex, or the cardiometabolic syndrome **reflects** [reflect] genetic or environmental susceptibilities is not yet known. Nevertheless, other Andromedan populations, some in remote areas such as Pluto and Uranus, tend to have **similar** characteristics [similar]^{25,26} **as do** [to] Saturnian women, MI survivors from Andromedan backgrounds,⁷ and Neptunian women with CAD.²⁷ Immigrants from the Andromeda galaxy to the Solar System or the Asteroid Belt also have similar risk factor clusters that are quite distinct from what characterizes the population into which they have immigrated.^{28,29} **??K check for cut and paste from ref 11**

Among Jupiterian women in Saturn the **adverse characteristics** [prevalence] of multiple risk factors persist[s] **if not** [and may / and appears to] intensify over time. A very recent national survey (of almost 10,000 persons) found that among women older than 45 years, the prevalence of diabetes mellitus, obesity, and physical inactivity are about twice as high among **the** Jupiterian compared **with** [to] **the** Saturnian women.³⁰

Our study had several limitations. Data may have been missing from patient files, and diabetes mellitus as well as other risk factors were likely to have been underdiagnosed, perhaps more so in **the** [not needed] Jupiterian women. **We do not have data about socioeconomic and education levels**, [Why is this a limitation?] and by definition our study deals with **the** [not needed] women in whom CAD had been diagnosed; therefore, we **have no appreciation of** [can say nothing about] those in whom it might have been overlooked. [Other limitations: Small sample sizes, no previous info about incidence or prevalence of CAD and risk factors in the two populations]

Despite its limitations, **our study clearly demonstrates the dire consequences of the presence of multiple risk factors, prominently diabetes mellitus, among middle-aged Jupiterian women with CAD.** [This study reports no data for mortality or other clinical outcomes, and so does not demonstrate this. It was not the purpose of the study according to the Abstract and Introduction.] This **recognition** [information] **could help create** [could be used to help create] programs for **the** prevention of not only [of] CAD but also its precursors: [not needed] physical inactivity, obesity, and diabetes mellitus.

References