Table 1: STS markers of the 7 infertile men with Y chromosome deletions.

STS	Region							
Markers		1.1	1.2	1.5	1.6	1.7	1.8	1.9
sY14		+	+	+	+	+	+	+
sY18		+	+	+	+	+	+	+
sY78		+	+	+	+	+	+	+
sY81	AZFa	-	-	+	+	+	+	+
sY83		-	-	+	+	+	+	+
sY85		-	-	+	+	+	+	+
sY84		-	-	+	+	+	+	+
sY90		-	-	+	+	+	+	+
sY100	AZFb	+	-	+	+	+	+	+
sY131		+	-	+	+	+	+	+
sY134		+	-	+	+	+	+	+
sY139		+	-	+	+	+	+	+
sY145		+	-	+	+	+	+	+
sY143		+	+	+	+	+	+	
sY153	AZFc	+	-	-	-	-	-	-
sY147		+	-	-	-	-	-	-
sY156		+	-	-	-	-	-	-
sY149		+	-	-	-	-	-	-
sY254		+	-	-	-	-	-	-
sY157		+	-	-	-	-	-	-
sY202		+	-	-	-	-	-	-
sY243		+	-	-	-	-	-	-
sY158		+	-	+	+	+	+	+
sY159		+	-	+	+	+	+	+

oligozoospermia. Since ours is the first study of Y-chromosome microdeletion frequency to be undertaken on an African population, a comparison with earlier data sets from this group was not possible.

The absence of Y-chromosome microdeletions in our African study population may be due to limited sampling. However, this finding is in general agreement with the few studies conducted in other parts of Africa that found frequencies of male infertility secondary to oligozoospermia or azoospermia to be much lower (~20%) in Africa than elsewhere [40-48]. Unlike some other regions, the most common cause of male infertility in Africa was found to be infection. Yeboah *et al*. reported on 595 infertile African males and found ~70% of them to have inflammatory testicular lesion due to STD [40]. A multi-center study by Cates *et al*. demonstrated that >50% of African couples had secondary infertility due to STD [41], which was a rate much higher than in non-African countries (*i.e.*, <30%).

In our study all active STD cases were excluded, although the association between male infertility and STD remains controversial. Some investigators have shown that treatment of infection directly improved the sperm quality in oligozoospermia [42,43] while others did not see any improvement in sperm quality after treatment [44,45]. It is difficult to know the precise frequency of azoospermia and oligozoospermia in Africa as certain cultural factors (*e.g.*, polygamy) are more common than in other parts of the world [46]. Therefore, an azoospermic man may have children whose actual biological father was another man if the wife had extramarital intersourse with a fertile male [47,48]. Financial constraints did not enable testing to confirm paternity when babies were born after infertility treatments at our centers.

All 5 cases with Y-chromosome microdeletion in the AZFc region had successful outcomes following IVF+ ICSI. A comparison of reproductive outcomes between couples with AZFc microdeletion and couples with an intact Y-chromosome showed no statistically significant difference. Our results confirm previous studies showing that Y-chromosome microdeletions do not appear to adversely affect fertilization and pregnancy rates (either in azoospermic or severe oligozoospermic men) when sperm are successfully retrieved [26-33,36]. The concerns that IVF+ICSI might yield poorer results in the setting of Y-chromosome microdeletions were not seen in previous reports [26-30]. However, Van Volde *et al*. [29] found fertilization and embryo quality to be significantly lower in