

**Table 1:** Clinical, psychological and psychophysical data of women with migraine and healthy women

	<b>Episodic Migraine (n=50)</b>	<b>Chronic Migraine (n=50)</b>	<b>Healthy Control (n=50)</b>
<b>Age (years)</b>	42 (38-46)	43 (39-47)	42 (39-45)
<b>Years with pain</b>	16.5 (14.0-19.0)	17.0 (15.8-18.2)	-----
<b>Headache intensity (NPRS, 0-10)</b>	8.3 (7.9-8.7)	8.0 (7.4-8.6)	-----
<b>Headache duration (hours/attack)</b>	25.0 (21.0-28.0)	22.0 (20.4-23.6)	-----
<b>Headache frequency (days/months) *</b>	6.0 (5.0-7.0)	22.1 (25.6-27.2)	-----
<b>HADS-A (0-21)</b>	12.4 (11.7-13.1)	12.0 (11.3-12.7)	-----
<b>HADS-D (0-21)</b>	10.3 (9.5-11.1)	10.5 (9.6-11.4)	-----
<b>STAI-T (0-60)</b>	25.4 (23.4-27.4)	26.1 (24.4-27.8)	-----
<b>STAI-S (0-60)</b>	21.7 (20.4-23.0)	20.6 (19.3-21.9)	-----
<b>MIDAS*</b>	34.2 (18.0-50.4)	63.0 (40.0-86.0)	-----
<b>Pressure Pain Thresholds (kPa)</b>			
<b>Temporalis #</b>	151.5 (136.6-166.4)	182.9 (163.8-202.0)	275.3 (258.1-292.5)
<b>C5-C6 zygapophyseal joint #</b>	137.1 (124.7-149.5)	136.8 (124.8-148.8)	236.4 (221.3-251.5)
<b>Second metacarpal #</b>	201.7 (184.3-219.1)	232.7 (215.7-249.7)	370.1 (342.7-397.5)
<b>Tibialis anterior #</b>	325.1 (295.7-354.5)	351.5 (322.5-380.5)	518.7 (489.2-548.2)

HADS: Hospital Anxiety and Depression Scale (D: Depression, A: Anxiety), STAI: State-Trait Anxiety Inventory (S: State; T: Trait); MIDAS: Migraine Disability Assessment Scale;

\* Significant differences between episodic and chronic migraine groups (student t-test, P<0.05)

# Significant differences between both migraine groups and healthy controls (ANOVA test, P<0.001)

**Table 2:** Distribution of the Val158Met Genotypes and Alleles of the Catechol-O-Methyltransferase Gene in Women with and without Migraine

	<b>Episodic Migraine (n=50)</b>	<b>Chronic Migraine (n=50)</b>	<b>Healthy Control (n=50)</b>
<b>Genotypes</b>			
<b>H/H (Val/Val)</b>	11 (22%)	11 (22%)	21 (42%)
<b>H/L (Val/Met)</b>	26 (52%)	27 (54%)	19 (38%)
<b>L/L (Met/Met)</b>	13 (26%)	12 (24%)	10 (20%)
<b>Alleles</b>			
<b>Val</b>	48 (48%)	49 (49%)	61 (61%)
<b>Met</b>	52 (39%)	51 (51%)	39 (39%)

**Table 3:** Differences in Headache Clinical Outcomes in Women with Migraine Depending on the Val158Met Polymorphism in the Catechol-O-Methyltransferase Gene

	<b>Years with Pain</b>	<b>Intensity (NPRS, 0-10)</b>	<b>Duration (hours/attack)</b>	<b>Frequency (days/month)</b>
<b>Women with the H/H (Val/Val) genotype</b>				
<b>Episodic (n=11)</b>	14.8 (10.0-19.6)	8.5 (7.3-9.7)	26.2 (15.7-36.7)	5.1 (3.5-6.7)
<b>Chronic (n=11)</b>	16.2 (11.4-21.0)	8.5 (7.4-9.6)	18.0 (7.5-28.5)	23.8 (21.2-26.4)
<b>Women with the H/L (Val/Met) genotype</b>				
<b>Episodic (n=26)</b>	16.5 (13.6-19.4)	8.4 (7.7-9.1)	23.8 (17.0-30.6)	6.7 (5.0-8.4)
<b>Chronic (n=27)</b>	19.0 (16.0-22.0)	8.0 (7.3-8.7)	22.5 (15.8-29.2)	21.9 (20.2-23.6)
<b>Women with the L/L (Met/Met) genotype</b>				
<b>Episodic (n=13)</b>	18.3 (13.9-22.7)	7.9 (6.9-8.9)	26.3 (16.7-35.9)	5.3 (3.9-6.7)
<b>Chronic (n=12)</b>	15.8 (11.2-20.4)	7.6 (6.5-8.7)	24.0 (13.9-34.1)	23.5 (21.0-26.0)

Values are expressed as mean (95% confidence interval)

**Table 4:** Differences in Anxiety, Depression, Sleep Quality and Headache Burden Women with Migraine Depending on the Val158Met Polymorphism in the Catechol-O-Methyltransferase Gene

	<b>MIDAS<sup>#</sup></b>	<b>STAI-S (0-60) *</b>	<b>STAI-T (0-60)</b>	<b>HADS-A (0-21)</b>	<b>HADS-D (0-21) *</b>
<b>Women with the H/H (Val/Val) genotype</b>					
<b>Episodic (n=11)</b>	22.9 (12.7-33.1)	22.4 (19.8-25.0)	27.5 (23.6-31.4)	11.8 (10.4-13.2)	11.2 (9.5-12.9)
<b>Chronic (n=11)</b>	45.7 (21.2-70.2)	18.1 (15.5-20.7)	27.0 (23.1-30.9)	13.1 (11.7-14.5)	10.5 (8.8-12.2)
<b>Women with the H/L (Val/Met) genotype</b>					
<b>Episodic (n=26)</b>	33.1 (14.8-51.4)	21.4 (19.8-23.0)	26.6 (24.0-29.2)	12.4 (11.5-13.3)	10.0 (8.9-11.1)
<b>Chronic (n=27)</b>	65.5 (37.2-93.8)	20.3 (18.6-22.0)	27.1 (24.5-29.7)	11.0 (10.0-12.0)	9.3 (8.2-10.4)
<b>Women with the L/L (Met/Met) genotype</b>					
<b>Episodic (n=13)</b>	45.2 (15.2-75.2)	21.7 (19.3-24.1)	21.5 (17.9-25.1)	12.6 (11.3-13.9)	10.2 (8.7-11.7)
<b>Chronic (n=12)</b>	77.0 (45.3-108.7)	23.8 (21.3-26.3)	24.0 (20.3-27.7)	13.3 (11.9-14.7)	13.3 (11.7-14.9)

Values are expressed as mean (95% confidence interval); MIDAS: Migraine Disability Assessment Scale; HADS: Hospital Anxiety and Depression Scale (D: Depression, A: Anxiety), STAI: State-Trait Anxiety Inventory (S: State; T: Trait)

\* Significant differences between Met/Met genotype and Val/Val or Val/Met genotype (2-way ANOVA test) within the chronic migraine group

<sup>#</sup> Significant differences between Met/Met genotype and Val/Val or Val/Met genotype (2-way ANOVA test) in both migraine groups

**Table 5:** Differences in Pressure Pain Thresholds (kPa) in Women with and without Migraine Depending on the Val158Met Polymorphism in the Catechol-O-Methyltransferase Gene

	<b>Temporalis*</b>	<b>C5-C6 joint</b>	<b>Second metacarpal*</b>	<b>Tibialis anterior*</b>
<b>Women with the H/H (Val/Val) genotype</b>				
<b>Healthy Controls (n=21)</b>	288.2 (263.1-313.3)	237.6 (217.5-257.7))	375.3 (343.9-406.7)	532.0 (493.6-570.4)
<b>Episodic (n=11)</b>	146.0 (111.2-180.8)	135.0 (107.2-162.8)	206.0 (162.7-249.3)	330.0 (276.9-383.1)
<b>Chronic (n=11)</b>	194.4 (159.6-229.2)	145.6 (117.9-173.3)	272.7 (229.4-316.0)	362.4 (309.4-415.4)
<b>Women with the H/L (Val/Met) genotype</b>				
<b>Healthy Controls (n=19)</b>	264.4 (238.0-290.8)	235.4 (214.3-256.5)	364.6 (331.6-397.6)	529.6 (489.2-570.0)
<b>Episodic (n=26)</b>	155.6 (133.0-178.2)	132.7 (114.6-150.8)	201.6 (173.4-229.8)	325.0 (290.5-359.5)
<b>Chronic (n=27)</b>	202.3 (180.1-224.5)	145.6 (127.9-163.3)	244.2 (216.5-271.9)	385.5 (351.7-419.3)
<b>Women with the L/L (Met/Met) genotype</b>				
<b>Healthy Controls (n=10)</b>	268.6 (232.1-305.1)	235.5 (206.4-264.6)	369.6 (324.1-415.1)	530.3 (474.6-586.0)
<b>Episodic (n=13)</b>	147.8 (115.8-179.8)	147.9 (122.3-173.5)	198.2 (158.3-238.1)	321.3 (272.5-370.1)
<b>Chronic (n=12)</b>	128.9 (95.6-162.2)	108.9 (82.3-135.5)	170.3 (128.8-211.8)	264.8 (214.0-315.6)

Values are expressed as mean (95% confidence interval);

\* Significant lower PPTs in Met/Met genotype as compared to Val/Val and Val/Met genotypes (3-way ANOVA test) within the chronic migraine group