International Journal of Advanced Research in Biological Sciences
ISSN: 2348-8069
www.ijarbs.com
DOI: 10.22192/ijarbs Coden: IJARQG(USA) Volume 5, Issue 7 - 2018

Research Article

DOI: http://dx.doi.org/10.22192/ijarbs.2018.05.07.022

Association of Human Papilloma Virus 16 & 18 and H. mole

Dr. Alaa Ghasoob Abid*
Dr. Najah Nori
Dr. Ghada Adnan Alkaban
*Corresponding Author

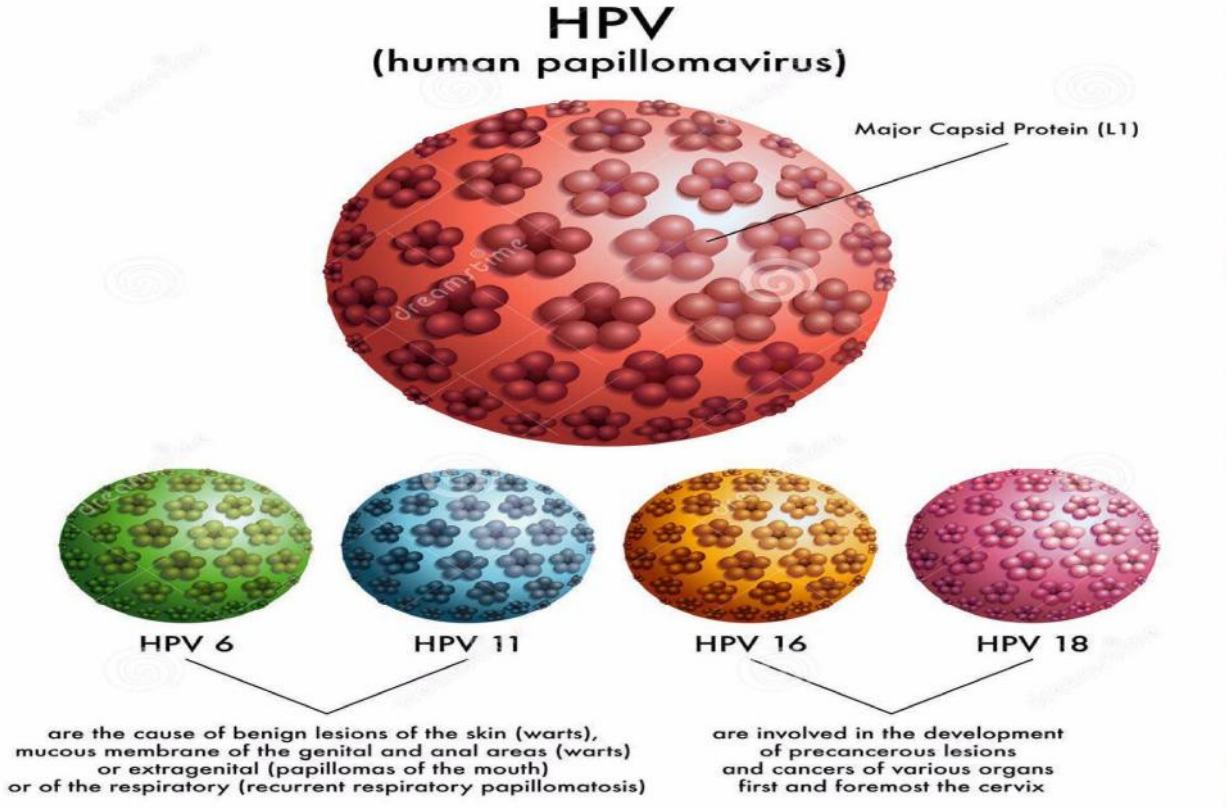
Introduction

Human papillomaviruses are small, double-stranded DNA viruses.

More than 120 HPV types have been identified

Nononcogenic types, such as types 6 and 11, can cause benign or low-grade cervical cell abnormalities.

High-risk, or oncogenic, HPV types act as carcinogens in the development of cervical cancer and other anogenital cancers such as types 16 and 18.



Molar pregnancy

Molar pregnancy is a premalignant form of Gestational trophoblastic diseases that occur after abnormal fertilization.

Molar pregnancy divided into:

Complete mole have a diploid chromosomal pattern, with all chromosomes being derived from the father by means of either monospermic or dispermic fertilization.

Partial Mole usually have a triploid karyotype (69XXX, 69XXY, or 69XYY) resulting from fertilization of a normal egg by 2 sperm. Therefore, triploid Partial Mole consists of 2 sets of paternal chromosomes and 1 set of maternal chromosomes.

Materials and Methods

This cross sectional study conducted at Al- Zahraa Teaching Hospital in Al- Najaf government from the period of April to September 2016 .

30 women with H. mole included in the study complete history from each woman taken including (age, Parity, address, occupation, blood group, previous history of abortion and H.mole, previous history of pelvic inflammatory disease, history of Pap smear). Examination generally and obstetrical was done.

Venous blood samples were aspirated from each patient about (5 ml) Bhcg titer was measured and complete investigation was done and centrifuge done to (3 ml) from blood samples then freezing at 0 C then send to laboratory to do test for IGg and IGm for Human Papilloma Virus 16 and 18 to proved association between H.mole and Human Papilloma Virus 16 and 18 by enzyme immunoassay.

Results

A total of 30 women with H.mole had been included in this study. The mean age of women was 26.23± 8.19 years.

Table (1): Basic characteristics of women with H. mole under study.

Characteristics		Number	Percentage
Age/years	≥35	6	20
	<35	24	80
Residence	Urban	14	46.7
	Rural	16	53.3
Gravida	≥5	9	30
	<5	21	70
Parity	≥4	7	20
	<4	23	80
Abortion	≥1	15	50
	0	15	50

Table (2): Distribution of patients with H. mole according to serum HPV 16 or 18 findings

Sero-positive			Sero-negative
13(43.3%)	HPV16	8(61.5%)	17(56.7%)
	HPV18	5(38.5%)	

Table (3): Association between age and serum HPV 16 or 18 finding.

		Serum		Total	P value
		Sero-positive	Sero-negative		
Age/years	15-20	5	6	11	0.923
		45.5%	54.5%	100.0%	
	21-35	6	9	15	
		40.0%	60.0%	100.0%	
	>35	2	2	4	
		50.0%	50.0%	100.0%	
Total		13	17	30	
		43.3%	56.7%	100.0%	

In table (3) showed age of women with H.mole and sero-positive HPV 16 or 18 statistically not significant.

Table (4): Association between address and serum HPV 16 or 18 findings.

		Serum		Total	P value
		Sero-positive	Sero-negative		
Address	Urban	**6**	**8**	**14**	**0.961**
		42.9%	**57.1%**	**100.0%**	
	Rural	**7**	**9**	**16**	
		43.8%	**56.2%**	**100.0%**	
Total		**13**	**17**	**30**	
		43.3%	**56.7%**	**100.0%**	

In table (4) showed patients with sero-positive addressed in rural area are more than urban, but statistically not significant.

Table (5): Association between blood group and serum findings.

		Serum		Total	P value
		Sero-positive	Sero-negative		
Blood group	A+	6	6	12	0.453
		50.0%	50.0%	100.0%	
	AB+	2	1	3	
		66.7%	33.3%	100.0%	
	B-	0	1	1	
		0.0%	100.0%	100.0%	
	B+	0	2	2	
		0.0%	100.0%	100.0%	
	O-	1	0	1	
		100.0%	0.0%	100.0%	
	O+	4	7	11	
		36.4%	63.6%	100.0%	
Total		13	17	30	
		43.3%	56.7%	100.0%	

In table (5) showed most patients with sero-positive had blood group O^{+ve} and A^{+ve}, but statistically not significant with sero-negative group.

Discussion

GTD forms a group of disorders spanning from the condition of complete and partial molar pregnancy through to the condition of the invasive mole, chorioca and very rarely PTD and because molar pregnancy has ethnic associassion in its epidemiology especially in Asian women, we started to high light more possible aetiologies beyond this condition and we have chosen HPV as a possible cause or associated factor for molar pregnancy.

As HPV can cause a variety of problems ranging from benign condyloma to more serios neoplasia, we assume this oncogenic behavior may be linked to the genetic imbalance in the etiology of molar pregnancy.

In our study we were able to collect 30 patients diagnosed to have H.mole and we had roughly studied some parameters like age, residency, parity and blood group before we study the infectious state and we found (table 1) that 80% of the patients are young less than 35 years the fact which is literary learned that moler pregnancy favors extreme of age.

Again in table 1 we found no significant association with parity and gravidity, results agreed by a study in Iran.

Regarding blood group we found that molar pregnancy. Is more common in blood group A^{+} and O^{+} results agreed by studies in Iran and AL Azher hospital.

In table 2 we found that 13 patients were sero- positive for HPV out of 30 which is significant association with mole pregnancy a result similar to Pae et al study, 1995 who showed that HPV -18 in 18% of H.mole and 50% of choriocarcenoma.

In table 3 we found that HPV infected cases are mainly in somewhat older age group than in tean age group (8 vs 6) the fact that young females are active in eliminating their viruses due to stronger immune response than older women .

In table 4 we found that sero- positive patients are mainly from rural area (7 vs 6) which is basically agreed with the fact that HPV mainly affects patients from lower socio-economic state.

So this study may be the trigger to be more aware about this association between H.mole and HPV infection, to follow up our patients regarding the complication of HPV by serial pap smears together with HCG titer.

However, very limited number of studies were found about this association for comparison, small cases size due to limited time of the study was the main obstacles in our study.

Conclusion

In our study we found that may be association between H.Mole and HPV infection type 16 & 18.

Recommendation

Further studies are needed to include larger numbers of women who are diagnosed as H. Mole to evaluate the association or prediction of HPV.

We need study that follow those sero- positive women to find any association with malignancy changes or not.

We need to study other types of HPV other the 16 & 18.

Thought it is not strong enough to mandate rather than advice to search for HPV in each young women with H.mole.

To follow each moler pregnancy by serial Pap smear and HCG titer.

Access this Article in Online	
Quick Response Code	Website: www.ijarbs.com Subject: Medical Sciences
DOI:10.22192/ijarbs.2018.05.07.022	

How to cite this article:
Alaa Ghasoob Abid, Najah Nori, Ghada Adnan Alkaban. (2018). Association of Human Papilloma Virus 16 & 18 and H. mole. Int. J. Adv. Res. Biol. Sci. 5(7): 289-293.
DOI: http://dx.doi.org/10.22192/ijarbs.2018.05.07.022