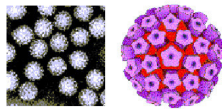
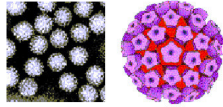


***Cavtat, IUSTI 2007  
Recommendations on HPV vaccination  
in female population***

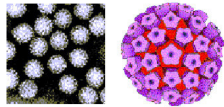
Goran Grubišić,  
president of Croatian Society for Colposcopy  
and Cervical pathology- CMA



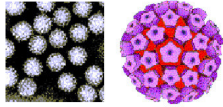
- ***Due to scientific reports on HPV 16/18 responsibility for more than 70% invasive cervical cancer cases as well as for CIN II/III , 25% CIN I, HPV 6/11 for 90% anogenital warts in both sexes and 9- 12% of CIN I it emerges the need to point importance of HPV vaccination with quadrivalent HPV 6, 11, 16 and 18.***



- ***Thanks to administration of preventive HPV 6, 11, 16, 18 vaccine significant fall of risk of ICC incidence, as well as high grade intraepithelial cervical, vaginal and vulval lesions and anogenital warts can be expected. Full eradication of these lesions remains still questionable.***
- ***Then we can conclude that vaccination is advisable prior to female and male population start to be sexually active.***



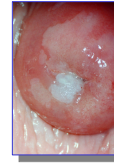
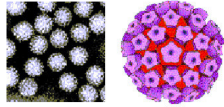
- ***Quadrivalent HPV vaccine is advisable also to these females which are positive on one of above mentioned four HPV types, because vaccine dokazano štiti from other mentioned types (only 0,1% females in performed testings were positive on all four types).***
- ***Quadrivalent vaccine has exclusively preventive, not therapeutical role. It is not advised for treatment of acute HPV induced lesions.***



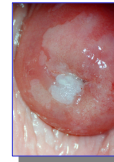
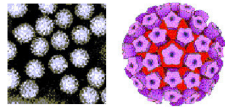
- ***It is extremely important that females and males already vaccinated must continue to undergo screening tests according to guidelines of profession.***
- ***The most effective measures in HPV infection prevention are competent informations, strenghtening of family role, pronouncing sexual education in schools and stimulation of responsible sexual behavior.***

## ***MESSAGES:***

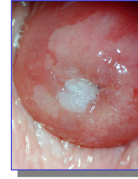
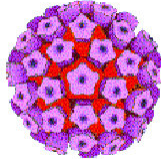
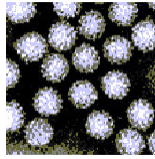
- ***1. HPV 6, 11, 16, 18 vaccination is recommended prior to HPV exposure, i.e. prior to sexual activity in female and male population.***



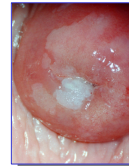
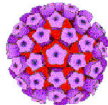
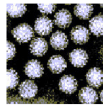
- **2. Vaccination is advisable to children and adolescent population to 15 years, and female population 16- 26 years, who are not still vaccinated, and for those who didn't receive all three doses of vaccine.**
- **3. Vaccine has to be administered intramuscularly, 3 separated doses of 0,5 mL vaccine according to following schedule: First dose on eligible day, second dose two months after the first, and third dose 6 months after the first.**



- **4. HPV vaccinated women has to continue regular screening tests to prevent ICC (Pap smear, colposcopy, HPV testing in indicated situations). These recommendations don't differ from those obliged for the whole population.**



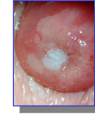
- **5. Prior to vaccination, females have to be informed of need to undergo regular gynecologic examination, including screening tests ( Pap smear, HPV testing, colposcopy, microbiology of lower female genital tract when indicated ) also after performed vaccination.**



- **6. Prior to vaccination men must be informed of need to undergo regular dermatovenerologic or urologic controls, including microbiology tests after vaccination.**



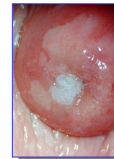
## Bibliography:



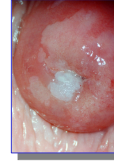
- 1. Quadrivalent vaccine against human papillomavirus to prevent anogenital disease Garland SM, Hernandez-Avila M, Wheeler CM et al. *FUTURE I Study Group, NEJM 2007;356:1928-43*
- 2. Quadrivalent vaccine against human papillomavirus to prevent high-grade cervical lesions *The FUTURE II Study Group, NEJM 2007; 356:1915-27*
- 3. Effect of prophylactic human papillomavirus L1 virus-like-particle vaccine on risk of cervical intraepithelial neoplasia grade 2, grade 3, and adenocarcinoma in situ: a combined analysis of four randomised clinical trials **Kevin A. Ault, The Lancet, Volume 369, Issue 9576, 2 June 2007-8 June 2007, Pages 1861-1868**
- 4. Efficacy of a quadrivalent prophylactic human papillomavirus (types 6, 11, 16, and 18) L1 virus-like-particle vaccine against high-grade vulval and vaginal lesions: a combined analysis of three randomised clinical trials **Elmar A Joura, Sepp Leodolter, Mauricio Hernandez-Avila, Cosette M Wheeler, Gonzalo Perez, Laura A Koutsky, Suzanne M Garland, Diane M Harper, Grace WK Tang, Daron G Ferris, et al., The Lancet, Volume 369, Issue 9574, 19 May 2007-25 May 2007, Pages 1693-1702**
- 4. *Europski sažetak opisa svojstava lijeka GARDASIL, EUSPC*
- 6. *Hrvatski sažetak opisa svojstava lijeka GARDASIL, CRO SPC, <http://www.aimp.hr>*
- 6. *<http://www.emea.europa.eu/hums/human/eparj.htm>*
- 6. *Quadrivalent Human Papillomavirus Vaccine Recommendations of the Advisory Committee on Immunization Practices (ACIP): Lauri E. Markowitz,<sup>1</sup> MD, Eileen F. Dunne, MD,<sup>1</sup> Mona Saraiya, MD,<sup>2</sup> Herschel W. Lawson, MD,<sup>2</sup> Harrell Chesson, PhD,<sup>1</sup> Elizabeth R. Unger, MD<sup>3</sup>*  
<sup>1</sup>Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (proposed) <sup>2</sup>Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion <sup>3</sup>Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne and Enteric Diseases (proposed. *MMWR, March 23, 2007 / 56(RR02):1-24*
- 8. Human Papillomavirus Vaccination: ACOG committee opinion, No. 344. American College of Obstetricians and Gynecologists. *Obstet Gynecol 2006;108:699-705*
- 9. Recommendation for the use of Quadrivalent Human Papillomavirus Vaccine, Leawood, KS, March 2007, <http://www.aafp.org/online/en/home/clinical/immunizations/adultimmunizations.html>  
[http://www.aafp.org/online/etc/medialib/aafp.org/documents/clinical/immunization/adolsched\\_Par\\_0001\\_File1mp/adolescentsched.pdf](http://www.aafp.org/online/etc/medialib/aafp.org/documents/clinical/immunization/adolsched_Par_0001_File1mp/adolescentsched.pdf)
- <http://www.medicalnewstoday.com/medicalnews.php?newsid=71172>

## EUROGYN 2007 CONCLUSIONS

- Roadmap on cervical cancer prevention
- **1 WHEN VACCINATE?**
- 9-14 yrs. routinely
- -18 yrs routinely, if state budget allows
- 15-26 yrs advisable on the individual basis
- >26 currently no conclusions



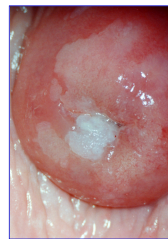
## **2. IS HPV TESTING NEEDED PRIOR VACCINATION?**



- **NO, under neither any circumstances, nor by means of now accessible methods**

## **3. SCREENING AFTER VACCINATION?**

- In this moment continue
- Probably to be modified through time period



#### **4. CONTROL OF VACCINATION** **APPLICATION**

- Organised follow up thanks to public health institutions, not on individual basis
- Difference exist between developed and developing countries
- Control is essential, but must not delay the beginning of vaccination