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Plenary Lecture, Special Lecture : 5A Hall

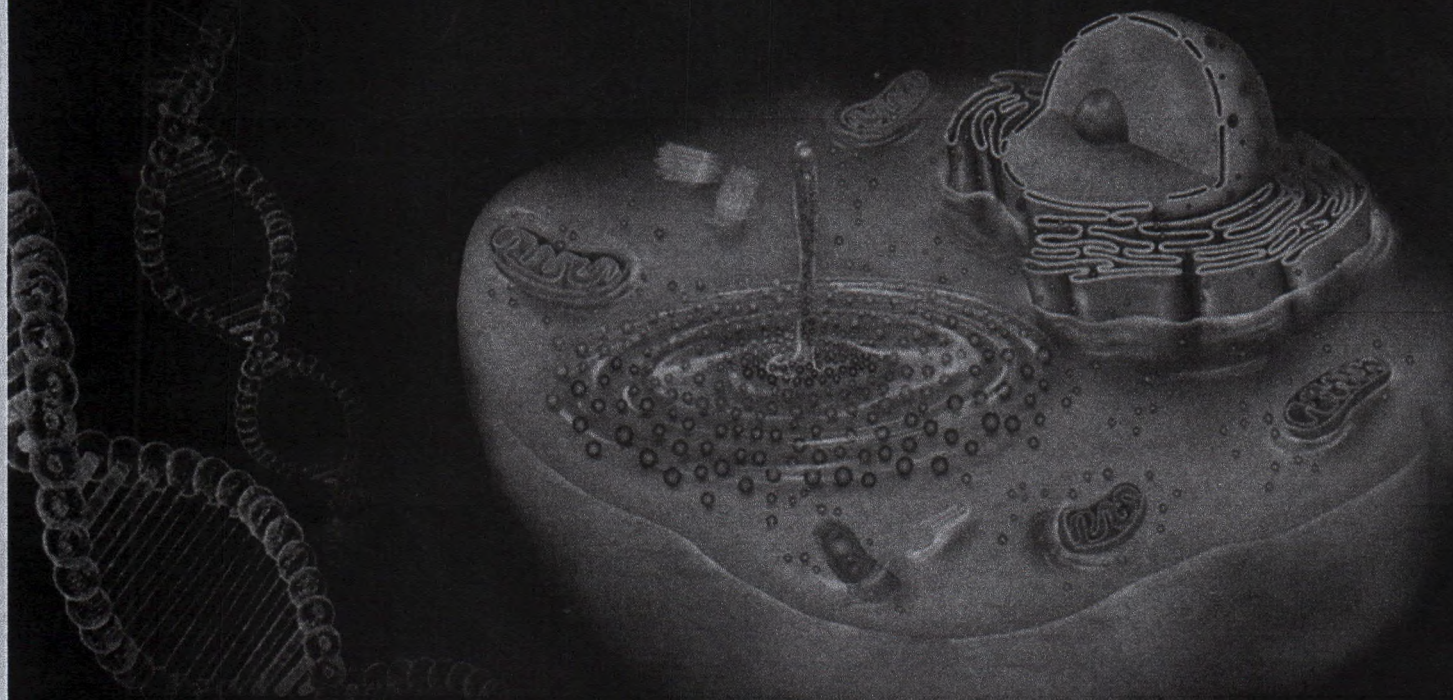
Symposium : Rm 321-322, Rm 323-324, Rm 325-326

Exhibition and Poster Presentation : 5B Hall

APICA

*Joint Conference of
8th Asia Pacific International Congress of Anatomists and
68th Korean Association of Anatomists*

October 28-31, 2018 BEXCO, Busan, Korea



Hosted by Korean Association of Anatomists

Supported by The Korean Federation of Science and Technology Societies (KOFST)
Korean Academy of Medical Sciences (KAMS)
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| Program At a Glance |

Schedule

Day 1	Room 321-322	Room 323-324	Room 325-326	Remarks		
Oct. 28	09:00-09:30	AsACA Registration (Registration Desk, 3FL, BEXCO)		Clinical Training Program: Anatomy for Rejuvenation (Pusan National University)		
	09:30-10:45	Pre-Congress Sessions: Organized with AsACA and APICA Part I : Head				
	10:45-11:00	Coffee Break (Lobby, 3FL, BEXCO)				
	11:00-12:15	Pre-Congress Sessions: Organized with AsACA and APICA Part II : Upper Limb	APICA Registration (Registration Desk, 3FL, BEXCO)			
	12:15-13:30	Lunch				
	13:30-14:45	Pre-Congress Sessions: Organized with AsACA and APICA Part III : Pelvis & Neck	14:30-17:50		Young Anatomists Session	
	14:45-15:00	Coffee Break (Lobby, 3FL, BEXCO)				
	15:00-16:15	Pre-Congress Sessions: Organized with AsACA and APICA Part IV : New challenges in clinical anatomy				
	16:15-16:30	Coffee Break (Lobby, 3FL, BEXCO)				
	16:30-17:30	Special Lecture (Pf. Hee-Jin Kim)				
	19:00-20:00	Welcome Reception (Tiffany 21 Cruise)				

Schedule

Day 2	Room 321-322	Room 323-324	Room 325-326	5A Hall	5B Hall	Remarks	
Oct. 29	8:00	Registration (Registration Desk, 3rd FL, BEXCO)					
	08:30-09:00				Opening Ceremony	Poster Attachment	
	09:00-10:40	Session 1 Gross Anatomy: Organized with CAA	Session 2 Brain & Neuroscience (I)	Session 3 Stem Cell & Development			
	10:40-11:00	Coffee Break (5B Hall, 3FL, BEXCO)					
	11:00-11:50				Plenary Lecture (I) (Pf. Kim, Jin-Soo)		
	11:50-13:00	Lunch					
	12:00-13:00	Luncheon Symposium by Seegene: Age of artificial intelligence (AI) for MDx assay development; Dae-Hoon Lee (Head of R&D, Seegene, Inc.) (5A Hall, 3FL, BEXCO)					
	13:00-13:30				Special Lecture (I) (Pf. Richard L. Drake)		
	13:30-15:10	Session 4 Physical Anthropology	Session 5 Immunology	Session 6 Cell Biology			Congress Tour
	15:10-15:30	Coffee Break (5B Hall, 3FL, BEXCO)					
	15:30-17:10	Session 7 Oncology	Session 8 Brain & Neuroscience (II) : Organized with JAA	Keynote Session (I)			
	17:10-18:10					Poster Presentation (I)	
18:30-20:00	Gala Dinner						

| Program At a Glance |

Schedule

Day 3	Room 321-322	Room 323-324	Room 325-326	5A Hall	5B Hall	Ramarks
Oct. 30	08:30-09:00 Morning Coffee Break (5B Hall, 3FL, BEXCO)				Poster Attachment	
	09:00-10:40	Session 9 Cryo-EM Technology : Organized with JAA	Session 10 Anatomy Education (I)	Keynote Session (II)		
	10:40-11:00 Coffee Break (5B Hall, 3FL, BEXCO)					
	11:00-11:50			Plenary Lecture (II) Pf. Stephen J. Galli		
	11:50-12:00 Photo					
	12:00-13:00 Lunch / Executive Committee Meeting of APICA (Rm 320)					
		Luncheon Symposium by Hitachi	Luncheon Symposium by SECTRA	Luncheon Symposium by ZEISS Korea		
	13:00-13:30				Special Lecture (II) Pf. Bernard Moxham	
	13:30-15:10	Session 11 Modern Tech in Microscopy	Session 12 Anatomy Education (II)	Keynote Session (III)		
	15:10-16:10 KAA Committee Meeting (Rm 320)				Poster Presentation (II)	
18:00- KAA Board Meeting (Chinese Restaurant 'Mingju')						
Day 4	Room 321-322	Room 323-324	Room 325-326	5A Hall	5B Hall	Ramarks
Oct. 31	08:30-08:45 Morning Coffee Break (Lobby, 3FL, BEXCO)					
	08:45-11:15	Oral Presentation (I) Gross Anatomy	Oral Presentation (II) Neuroscience	Oral Presentation (III) Anatomy Education & Cell Biology		
	11:30-11:40			APICA Closing Ceremony		
	11:40-12:40			68th General Assembly of KAA		

the survival rate at 30 days after surgery was 100% in both groups. In the Prolene group and the PDS group, the intraoperative diameter of the common bile duct was not statistically significant ($P>0.05$). In the Prolene group, there was no statistically significant difference between the intraoperative diameter of the common bile duct and the diameter of the common bile duct 30 days after the operation ($P>0.05$). In experimental animals of the PDS group, intraoperative diameter of the common bile duct was compared with that of the common bile duct at 30 days after operation, and the difference was statistically significant ($P<0.05$). The diameter of the inner wall of the common bile duct was not statistically significant between the Prolene group and the PDS group 30 days after operation ($P>0.05$). Comparing ALT, AST, TBIL and ALKP in the Prolene group and the PDS group, it was found that the differences were not statistically significant before surgery, 7 days after surgery, 14 days after surgery and 30 days after surgery ($P>0.05$). However, as can be seen from the line chart, compared with the Prolene group and the PDS group, the postoperative ALT, AST, TBIL and ALKP values were relatively low in the PDS group. In terms of early prognosis, biliary-enteric anastomosis was sutured with Prolene line, which may have less effect on the anastomosis than PDS line. However, the effect on liver function may be less than that of Prolene when biliary-enteric anastomosis is sutured with PDS. Their long-term prognosis still needs further study.

Key Words: Pancreatoduodenectomy, Biliary-enteric anastomosis, Suture selection, Animal experiment

P137

Reproductive Parameters of Male Albino Rats After Induction in Sleep Deprivation Models

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Paradoxical sleep deprivation (PSD) and total sleep

deprivation (TSD) caused disrupt male infertility but sleep recovery (SR) can improve male reproduction function that connected with occupational works health. The aim of this study was to determine the difference in reproductive parameters in male albino rats after exposed by various sleep deprivation model. This research was experimental post-test only with control group design. Rats were divided into 5 groups (6 animals each group) : negative control, PSD (II), TSD (III), PSD with SR, TSD with SR. Results showed in mean spermatogenic group IV (8.35 ± 0.06) and V (8.27 ± 0.27) had higher scores, group IV has the highest number of Leydig cell ($5,91 \pm 1,43$), group I had the highest rates ($40,02 \pm 2,04$) of number of Sertoli and there are no significant differences in mean diameter ($p=0,598$) and epithelial height ($p=0,895$).

There were differences score spermatogenic post-SR, number of Sertoli and Leydig cells, but no differences in diameter and epithelial height of seminiferous tubule after exposed by various sleep deprivation stress model. Sleep recovery in occupational work can repaired the parameter of histological parameter in reproduction quality.

Key Words: Male albino rats, Reproductive parameters, Sleep deprivation models.

P138

Effect of Bisphenol-A to the Fertility of Male Rats

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Bisphenol A is a chemical found in many hard and clear plastic which is used every day include water bottles, baby bottles, dental and medical devices and coating of metal-based food and beverage cans. High doses of BPA have been linked to the health problems such as cancer, cardiovascular and reproductive disorders. To determine the effect of BPA to fertility, we studied the effect of bisphenol A to the level of testosterone and number of

spermatozoa on rat. The post-only control groups study were carried out on 20 male wistar *Rattus norvegicus* in the age of eight weeks and 200-250 gr body weight. There were divided in four groups for five each, one group as a control group (C) and the other three groups treated with different doses of BPA. Group 1 (T1) treated with 25 mg/Kg body weight/day, group 2 (T2) 50 mg/Kg body weight/day and group 3 (T3) 100 mg/Kg body weight/day of BPA for 51 days. Blood were collect to measure the level of testosterone and spermatozoa were collected from the duct of epididymis. This study found that testosterone level of control group (C) ($7,78 \pm 1,4$ ng/l) were significantly higher than T3 ($4,02 \pm 1,0$) and it seem tend to be higher than T1 ($6,19 \pm 3,2$ ng/l) and T2 ($5,23 \pm 0,9$ ng/l). Spermatozoa number of control group ($39,1 \pm 1,0$ million/ml) were significantly higher than T1 ($30,2 \pm 2,3$ million/ml), T2 ($21,1 \pm 2,8$ million/ml) and T3 ($19,7 \pm 3,0$ million/ml), and there were also significantly different between groups. Our study shows that high doses of BPA can affect fertility through decline of testosterone levels and spermatozoa number

Key Words: Bisphenol A, infertility, Spermatozoa, Testosterone

P139

The effect of bisphenol-A giving on estrogen hormone level and maturation index of vagina epithelial cell *Rattus norvegicus* wistar albino strain

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Bisphenol-a (BPA) or propan 2,2-bis (4-hydroxyphenyl) compound is the main ingredient of making polycarbonate plastic and epoxy resin making material. Bisphenol-a in its active form, has estrogen hormone activity. Bisphenol-a is also one of the

endocrine disruptors compounds that can interfere the biosynthesis, secretion, work, or natural metabolism of a hormone. This study aims to determine the effect of bisphenol-a on estrogen hormone levels and maturation index of vaginal epithelial cells *Rattus norvegicus* strain wistar albino. This study is an experiment post-test only control group design with 20 rats wistar albino strain with age 2-3 month with weight 200-300 gr as samples. Samples were randomly assigned and divided into four groups consisting of the untreated control group, the experimental group with each being given a dose of 25.50 and 100 mg / kg bw / day. Examination of estrogen levels, in blood serum using ELISA. Data were analyzed by one way annova test. Analysis of maturation index data using Kruskal Wallis. It was found that there was an effect of bisphenol-a on estrogen hormone level on *Rattus norvegicus* strain Wistar albino (p value = 0,041), and there was an effect of bisphenol-a on the maturation index of vaginal epithelial cell *Rattus norvegicus* Wistar albino strain.

Key Words: Bisphenol-A, Estrogen Hormone, Maturation Index of Vaginal Epithelial Cells

P140

Comparison of bacteria isolate in anatomical laboratory and other biomedical laboratories of medical faculty muhammadiyah university of purwokerto

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Background: Infectious diseases are still the top 10 causes of death in the world. Laboratory is a specific environment for the development of infectious bacteria. Anatomical laboratory as a cadaver preparation plays an important role in the development of bacteria that

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Background

Bisphenol A (BPA) is an organic synthetic compound with the chemical formula $(CH_3)_2C(C_6H_4OH)_2$ belonging to the group of diphenylmethane derivatives and bisphenols. It is a colorless solid, soluble in organic solvents, but poorly soluble in water. BPA is used primarily in the production of polycarbonate plastics and epoxy resin BPA found in many hard and clear plastic which is used every day include water bottles, baby bottles, dental and medical devices and coating of metal-based food and beverage cans. High doses of BPA have been linked to the health problems such as cancer, cardiovascular and reproductive disorders.



Aim of Study

To determine the effect of BPA to fertility, we studied the effect of bisphenol A to the level of testosterone and number of spermatozoa on male rat

Material and Methods

- The post-only control groups study
- 20 male wistar *Rattus norvegicus* in the age of eight weeks 200-250 gr BW
- Divided into 4 groups for five each: control group (C) and treated group (T1, T2, T3) for 51 days.
- T1 : treated with BPA 25 mg/kg BW/day
- T2 : treated with BPA 50 mg/kg BW/day
- T3: treated with BPA 100 mg/kg BW/day
- Blood were collect to measure the level of testosterone
- Spermatozoa were collected from the duct of epididymis.



Results

Table: Testosterone level and Spermatozoa number of control and treated groups of male rats

No	Groups	n	Testosterone (ng/L) (mean±SD)	p	Spermatozoa (mio/ml) (mean±SD)	p
1	Control	5	7,78±1,4		39,1±1,0	
2	T1(25 mg BPA/kgBB/d)	5	6,19±3,2	0.042	30,2±2,3	0.000
3	T2(50 mg BPA/kgBB/d)	5	5,23±0,9		21,1±2,8	
4	T3(100 mg BPA/kgBB/d)	5	4,02±1,0		19,7±3,0	



Conclusion

Our study shows that high doses of BPA can affect fertility through decline of testosterone levels and spermatozoa number

References

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APICA

**8th Asia Pacific International
Congress of Anatomists**

Certificate of Attendance

presented to

Eryati Darwin

Republic of Korea

*The Organizing Committee extends its warmest gratitude to you for active participation in 8th Asia Pacific International Congress
of Anatomists (APICA) held Oct 28-31, 2018 in Busan, Korea*

October 31, 2018

Kyu Youn Ahn, MD, PhD

*Congress President
President of Korean Association of Anatomists*

